ABSTRACT OF THE

Annual Oration

ON THE

NATURAL HISTORY AND EPIDEMIOLOGY OF CHOLERA,

Delivered at the Medical Society of London,

BY SIR JOSEPH FAYRER, K.C.S.I., F.R.S.

MR. PRESIDENT AND GENTLEMEN,—The subject I have selected to bring before you is the "Natural History and Epidemiology of Cholera." It appeared to me, after revolving in my mind other possible subjects for this address, that I could hardly select one of greater interest at any time, but especially now that the dark shadow of this mysterious pestilence which has so recently loomed over Europe has passed away, after threatening, though not involving, our own islands—thanks, no doubt in a great measure, to the protection afforded by a system of sanitary administration which, whilst preserving the general health of the people, has rendered them less susceptible to disease, the local causes of which it has contributed to diminish, if not to destroy.

Cholera exhibits many characters in common with the plagues of the middle ages: like them traversing the earth in zones; spreading in tropical, temperate and polar regions; attacking all sorts and conditions of men; uncertain and often apparently capricious in its incidence; terrible from the rapidity and intensity with which it strikes, and from the obstinacy with which it resists all therapeutic measures; yet, at the same time, obedient to certain laws which regulate its incidence, diffusion and decline. Of its cause—if, indeed, we may assign to it any single cause—we are still ignorant; but experience and observation have made us so far familiar with its habits and the manner of its propagation and diffusion, that we are able to say how its incidence may be evaded, its course stayed, its rigour mitigated, and how it may be disarmed of much of its terror. Nor are we without hope that in time to come it may, like the black death, the sweating sickness, and other pests, give way before the application of the laws of hygiene and take its place among the records of the past. Having much in common with other epidemics, cholera possesses well-marked features of its own, but there is some reason for believing that it may have close etiological affinities with other diseases which in many respects differ from it widely in their characters. No disease better illustrates the peculiarities of an epidemic diffused far and wide over extensive countries, after leaping from one to the other, as it were, by bounds, or spreading rapidly among more limited communities, following a definite track, modified by climate or geographical position, dying out gradually or rapidly, to become extinct for a time, or to remain in abeyance till revivified into activity by fresh influences. On the other hand, it may occur in the sporadic form, or prevail as an endemic in certain regions from which it is never absent (such as in what is called the endemic area of Bengal), whence it may spread epidemically to regions beyond.

Cholera is an ancient disease; as far back as the records of medicine extend descriptions of it are to be found. It is described by Hindoos, Chinese, Greeks, and other ancient writers of the pre-Christian era; by Romans, Greeks, Arabs, and a long succession of other authors up to the present day. [The history of the distribution of the various outbreaks was then given.] Though it has extended so widely over the earth's surface, there are geographical areas which have not felt its malign influences. In some it has never appeared; in others its incidence has been so slight as to amount practically to exemption. These regions (according to Hirsch and Cunningham) are: the whole of Oceania, except perhaps the north-eastern parts of Australia, Tasmania, New Zealand, Fiji, and the Malay archipelago. In Africa, the east coast south of Delagoa Bay, southern and central divisions of the interior up to the Soudan, and the west coast up to the Rio Grande, Ascension. In North America, all the country north of the fiftieth parallel; in the West Indies, Martinique. In South America, the South Polar Lands, the Falkland Islands, Terra del Fuego, and Patagonia. In Europe, Iceland, the Faroë Islands, the Hebrides, the Shetland and Orkney Islands, Lapland, and Russia north of the sixty-fourth parallel. In Asia, the northern Governments of Siberia and Kamschatka; it is uncertain about Mongolia and Manchooria. In India cholera has either not visited, or but very slightly, the Andaman Islands, Mussoorie, Montgomery, Mooltan, Muzzafargurh, Dera Ghazi Khan, Sialkot, and Nowshera. The European towns that have hitherto practically escaped are Wurzburg, Frankfort-on-Main, Olmutz, Falun, Rouen, Versailles, Lyons, Sedan, and Cheltenham.

On the other hand, there are places from which cholera is never absent, and these endemic areas (according to Corre) comprise India, Indo-China, and perhaps a part of the islands of the Malay archipelago—a vast assemblage of countries to which we might give the name of Indo-Malayan, and which corresponds to one of the hottest and dampest zones of the world; its limits would be, on one hand, the tropic of Cancer and the 10th degree of south latitude; on the other hand, the 65th and 125th degrees of east longitude. In India itself, which is regarded by many as the sole birthplace and home of cholera, it is not by any means confined to Lower Bengal and the delta of the Ganges, as is sometimes stated, but is endemic in several other and widely distributed areas; the deltas of the Brahmapootra and Mahanuddy; the interfluvial tracts of Behar; the deltas of the Irawaddy, Salwin, Godavery, Kistna, and Cavery; the Konkan and Malabar coasts; the southern half of the North-West Provinces and Oudh; the Gurgaon, Delhi, and Karnal districts between the Jumna and Sutlej; the Kangra, Gurdaspur and Amritsar districts between the Beas and Ravi; the Hoshiapur and Jullundur districts between the Beas and the Sutlej; the cities of Madras and Bombay; the valley of the Nerbudda and Tapti rivers. Hunter's investigations show that cholera is endemic in Egypt; in parts of Russia there can be little doubt that it is so. It is continually present in England, as seen by the Registrar-General's returns, and probably in many other countries, though the mortality is seldom so high as to attract notice, except when localising causes and epidemic influence co-operate to develop an epidemic. Cholera, then, occurs in the sporadic, endemic, or epidemic form: in the former it may appear anywhere; it is endemic in Bengal and other localities; whilst under certain conditions it rages from time to time over various parts of the world, like fever, plague, dengue, small-pox, and others, including the great epidemics of the middle ages, some of which are now all but, if not quite, extinct. The term epidemic is, I fear, but an expression of ignorance; we do not know its real nature, we only know that there is a potent factor in the diffusion of disease, whether it be a dynamic agency, an altered constitution of the atmosphere, or a widely diffused miasm of particulate form spreading far and wide over the earth's surface, as did the volcanic dust from Kratakoa, which but recently girdled the earth. It may depend on certain states of the atmosphere, deficiency or excess of electrical or magnetic tension, different degrees of moisture, of ozone, or other modification of its physical properties; something propagated in aerial or telluric currents, recurring at intervals, co-operating with local and personal causes, and conferring on the disease its quality of epidemicity; in some cases, perhaps, not only acting as the propagating agent, but as the cause itself. It is believed by some that local causes, in addition to certain atmospheric conditions, may determine autogenetic changes in the body which engender disease, and that the existence of a specific primary cause is not always necessary. The general opinion, however, is that an external primary cause, a distinct entity, is required; in the case of cholera this is the so-called germ, said to be capable, under favouring conditions, of multiplying to any extent. The advocates of this theory have been energetic in their researches for it among micro-organisms, and have thought that they discovered it in a bacillus. A singular expression of this creed, therapeutically, was witnessed recently in Spain in inoculation for the prevention of cholera; the results, I believe, have not been satisfactory.

There are certain erroneous notions about cholera—e.g., one gives that name to the disease in its fully developed condition alone; but the fact is, that it presents many

phases, varying in gravity from simple malaise to collapse and the coma of the worst forms of fever. Sporadic cholera, or cholera nostras, as it is called, when it occurs in this country, is regarded as a different disease from Asiatic cholera, or cholera maligna: but the cholera of our country is undistinguishable at certain stages from that of India. I believe that the difference in intensity or epidemic prevalence depends on climate, locality, and the unknown conditions already alluded to. I saw as malignant a case of algide cholera in the Lambeth Infirmary three years ago as I have ever seen in Calcutta. "There is no such thing," says Dr. Hutchinson, of the Bengal Medical Service, "as Asiatic cholera, if we mean by Asiatic that the disease is prevalent in India alone or any given part of the eastern continent. British cholera, Asiatic cholera, Damietta cholera, are all essentially the same disease, though, it may be, differing in degree and virulence"; and he remarks that cases of cholera appear every year in England in the Registrar-General's returns, which, under conditions which appear from time to time, would produce an epidemic, as is the case, only more frequently and with more activity, in India, China, Egypt, and elsewhere. Hutchinson also says that the law under which cholera originates, disseminates, and declines is as rigid as any known law, and shows that in 105 outbreaks among European troops in India and in gaols, it was found that the percentage of deaths, which had reached 80 per cent. in the first fourteen days, rapidly diminished. He further remarks that "while three to five days represent the period of incubation of a typical invading cholera, fourteen days mark the limit of an advance of a typical epidemic. This is true of epidemic cholera wherever it appears, whether in Europe or Asia, whether in a city, amongst troops, or in a gaol;" and he adds that the period of incubation with regard to individuals is forty-eight hours, deduced from certain well-known cases; but this, I think, is not to be relied on; it may be longer or shorter.

The suddenness and virulence of certain outbreaks are remarkable, and point to some factor apart from contagion or local insanitary conditions. This may be followed by an equally rapid decline, and the remarkable alternations, whether for better or worse, caused by changes of weather, fall of rain, depression of temperature, thunderstorms and gales of wind, are very suggestive of the influence exerted by meteorology on its progress. Sudden outbreak followed by rapid decline was well illustrated when cholera attacked our troops and ships in the Crimea, and it often occurs in India. The position and physical characters of a locality, apart from insanitary conditions, are to be taken account of. Elevation has an influence, though less positive than relative, but cholera has occurred at Simla and other hill stations in India over 7000 feet above the sea.

The nature of the soil and the geological characters of a district have probably something to say in the localisation of cholera. Some have thought that it is less prevalent on sandy, porous ground; on granite, metamorphic, and trap rocks; on laterite and volcanic formations, and on the primary geological deposits; but the widespread distribution of the disease does not point to this as a very important factor. Cholera prevails in deltas; but that it may occur with great virulence even in a desert we know from Indian experience, and Sir Thomas Seaton's account of his march across the desert of Pat in Sind proves not only that it may occur, but it suggests its relation to fever and insolation. Bryden says: "The geographical distribution of an invading cholera is purely a phenomenon of meteorological significance. Epidemic cholera is never in any case spread *over a definite geographical area* by human intercourse alone; nor can human agency cause the boundaries of a natural province which has been occupied by cholera to be transgressed so that a cholera *epidemic from such a source* shall appear in the province immediately adjoining and become generally diffused among its inhabitants."

Statistics given by Dr. H. W. Bellew, C.S.I., in his "History of Cholera in India," show that a definite and fixed relation exists between cholera prevalence and seasonal distribution of rainfall and the condition of the soil which receives it. The conditions of the subsoil water, its fluctuating level, and its stagnation, are no doubt concerned in the development of cholera, as beyond a doubt they are in that of fever, of which it is a potent factor, for it is certain that a water-logged subsoil and undrained ground materially affect the public health and add to the mortality from fever, and probably also from cholera.

With regard to the spread of cholera, theories of contagion and diffusion by human intercourse do not explain the movements of epidemics, for the history of the last fifty years shows that though means of communication have greatly multiplied in India, as everywhere else, epidemics have neither increased in frequency, progressed more rapidly, nor altered as to their general direction. In fact, of places that lie on the main line of traffic, some suffer least, while others, more inaccessible, suffer most. With reference to dissemination, it has been asserted that cholera breaking out in such an assembly as the Hurdwar Fair, on the dispersion of the pilgrims the disease has been diffused in all directions over the country; but, on careful analysis of facts, it will be found that, although the pilgrims on the spot have died in all directions whither they have travelled, cholera has appeared in others only in the direction in which the epidemic was moving. Further, it has been found, in reported cases of importation of cholera from one station to another, that the disease had already manifested itself in the district before the particular case which was supposed to have imported it had arrived. Wherever thorough investigation has been possible, it has been found that explanation based on the theory of contagion fails to account for facts.

There are several theories of the causation of cholera. Briefly, they are as follows:—That it is due to a miasmatic poison, which, being absorbed by the lungs or alimentary canal, produces a primary disease of the blood, where it is rapidly multiplied and causes disturbance of vital functions. That the diffusion of the disease is effected by human agency, the specific poison being carried by the persons or effects of those who have been exposed to it. That it is due to a specific poison or germ which passes from the bowels of one person into those of another, chiefly by water, the poison being contained in the dejecta. A modification of this theory assumes that, to produce cholera, the organic germ must be in a certain vibrionic stage of decomposition. This germ may be preserved in a dry state for years, but whether fresh or old, it undergoes rapid changes in water. Oxidisation, acids, and certain degrees of temperature, it is inferred, can render it harmless. According to Pettenkofer, a germ is developed in a damp porous soil with fluctuating subsoil water level, impregnated with organic matter; it is, in short, earth-born. The germ must remain in the soil some time, and ferment before it acquires poisonous characters; it then rises into the air as a miasm, and thence effects entry into the body by means of air, food, or water.

In 1883, Professor Koch, after investigating cholera in Egypt and later in India, discovered a bacillus in the alvine discharges of cholera patients, which was announced to be the germ which caused the disease. The doctrine of contagion received thereby an impulse by which the dread of it became enhanced, and Southern Europe for a time was almost demoralised by fear, whilst the old measures of coercion and quarantine threatened to be reimposed with greater severity than ever. In May, 1884, the Secretary of State for India, at my instance, despatched a commission (Drs. Klein and Gibbes) to investigate the subject in India. In March, 1885, they submitted their report, and a committee of physicians and pathologists was convened to consider it. The following conclusion was arrived at: That comma-shaped bacilli are usually found in the dejecta of persons suffering from cholera, but that there are no grounds for assuming that they are the cause of the disease; that they are, in fact, but epi-phenomena—thus confirming the conclusions of Lewis and Cunningham, arrived at years before, after a long and careful microscopic study of the disease in India.

Whilst fully recognising the great value of bacteriological researches and their bearing upon etiology, the full importance of which cannot yet be estimated, I demur to a microbe being accepted as the solution of such a problem as the cause of cholera. Dr. Bryden maintained that cholera is due to a miasm, and has a perennial abode in certain areas of India, and in other districts is renewed by invasion from these areas; that the germ is earth-born and aerially conveyed; and that the disease has no power of continuous manifestation throughout the year. He thought it could be transmitted by fomites, but that the aggregate of cases so transmitted would not produce an epidemic. Dr. E. Goodeve suggests that two factors are needed: the one, some air-borne material, or some *dynamic modification* of atmospheric elements coming from without; the other, some local element; neither being potent unless united. The

peculiar atmosphere sweeps along hither and thither, and it is only when it meets with the other peculiar substance that the poison is generated or the effect produced.

For my own part, I am unable to convince myself that any of these theories satisfactorily or conclusively explain all the phenomena exhibited by a cholera epidemic, or that one view can be accepted to the absolute exclusion of all others, for there is much to support each. Whether this ultimate cause be a bacillus, a chemical molecule, or the outcome of forces surrounding us, of external influences acting on cerebro-spinal centres and producing certain perturbations of physiological processes, or perhaps developing an autogenetic poison, is a question still demanding solution, and I agree with Chevers that the cause will probably not be revealed to anyone who searches with narrowed views. There is a great tendency in these days to trace all disease to a specific exterior cause, but we must not lose sight of the possibility of poisons autogenetically developed, with which the researches of Gautier, Peter, Brown, Lauder Brunton, and others are making us familiar, or of altered conditions of innervation, deranged natural physiological processes of vaso-motor action caused by forces acting from without, giving rise to disease. The primary cause—i.e., the factor or group of factors which cause cholera—is still unknown; but so much, however, has been learnt of its habits, that in Europe and India we have come to know that action based on any theory of contagion is as useless as it is unprofitable. As to the local conditions which foster and develop, if they do not cause, cholera, the most potent and protective safeguards against them are cleanliness, pure air, pure water, good food, clothing, lodging, and healthy conditions of living; and, with reference to water, as Dr. Simpson of Calcutta remarks, "a study of the distribution, progress and seasonal changes indicates that the chief factor is a want of pure water."

The belief in transmission by human intercourse is still firmly held by the highest authorities; few consider that there is danger from mere contact or personal communication, but that the danger lies in the transmission of the germ through water or other channel from the bowel of one person to that of another; hence they properly insist on what others equally admit—the importance of the purity of drinking water; who do so not because it contains a germ, but because impurity tends to develop the pathological conditions which result in cholera. For my part, I am unable to accept the water theory as a sufficient explanation of all cholera outbreaks, especially in those which occur where the water is beyond suspicion of cholera contamination, and my agnosticism leads me to seek the explanation in causes of a wider and more general character, though I desire to speak as one who is still waiting for further information, and who, though strongly impressed with the incommunicability of cholera by the ordinary modes of contagion, is still not prepared to assert dogmatically that under certain conditions it may not become communicable by some miasm engendered in localities such as quarantine lazarettes, where disease is intensified by crowding. I hold, moreover, that, until contagion in any form be entirely disproved, authorities are justified in adopting measures which, like those in force in our own country, whilst avoiding all oppressive or coercive interference with personal liberty, take reasonable precautions against possible sources of infection and give full effect to all known practical measures against the importation or diffusion of disease. Happily, however much we in England and India may happen to differ as to certain points in the etiology, we are in accord as to the principles on which preventive sanitary measures should be conducted. As regards coercive measures, such as cordons and quarantine, they are rejected as useless, bringing many evils without preventing the spread of disease.

The question arises, What does it behove each individual of a community to do, as regards himself, his household, his village, town, and country, when cholera menaces or has actually made its appearance? Attention should be directed to careful living, careful clothing, and moderation in habits and diet. Avoid depressing influences, fear, over-fatigue, chills, violent alternations of temperature, aperient medicines (especially those of a saline nature), indigestible food, impure water, unripe or over-ripe fruit, and be careful to observe and promptly check any tendency to diarrhœa. Pay attention to ventilation, to perfect drainage, to absolute purity of water supply, and to prevention of overcrowding, using all influence to secure this throughout village or town. Do not be afraid to attend on the sick, for no danger is incurred thereby. Disinfect excreta, and thoroughly cleanse effects, houses, and rooms. Avoid quarantine and coercive measures, which divert attention from the true sources of safety, summed up in the expression "complete sanitation."

Although much remains to be known about the causation of cholera and its apparent caprices in incidence and diffusion, yet from what experience and observation have taught us we seem to be warranted in stating the following to be facts with reference to the disease. 1. That cholera has been present in India and other countries from the earliest times, and that isolated cases occur in almost all countries. 2. That cholera is always present, not only in certain parts of India, but elsewhere, and that in India outside these areas its prevalence varies in different years and according to the season of the year. 3. That cholera does not attack all the places within an epidemic area. 4. Meteorological changes produce sudden alterations in the activity and intensity of an outbreak. 5. That the rate and direction of an epidemic are not influenced by facilities of communication or by the greatest streams of human traffic—the opening of the Red Sea route, for example, not having increased its diffusion. 6. That the cases are more frequent and more severe at the commencement than in the continuance of an outbreak. 7. That hygienic measures afford the greatest security, but are not an all-powerful safeguard against cholera; local insanitary conditions and impure water favour its incidence and increase its intensity; that it is important to check all diarrhœa in times of cholera prevalence. 8. That cordons and quarantine have utterly failed to prevent the spread of cholera, but, on the contrary, have done harm. 9. That to enter an area over which cholera is present, or to travel within that area, is especially dangerous to a new comer, while residents whose circumstances of living are favourable have a better chance of escape. 10. That removal is the best course when cholera attacks a regiment or other body of men. 11. That attendants on the sick have not suffered more than others. 12. That impure water, irritating articles of diet, unripe fruit, and saline aperients are liable, during cholera prevalence, to bring on diarrhœa and the disease. 13. That fatigue, exhaustion, fear, and anxiety are powerful predisposing causes. 14. Many circumstances attending the outbreak of the disease and the pathological conditions then developed seem opposed to a specific poison as being the cause of the disease. 15. Having suffered from cholera gives no immunity from recurrence of the disease.

The sanitary measures recommended by Government, if carried out, are such as may imbue us with confidence that, if cholera appear, we shall be protected against any intensity of prevalence. The more we can perfect the measures now in force (and much can be done towards this, for insanitary houses are still far too numerous everywhere)—the more thoroughly our individual and collective support, moral or material, be accorded, the more complete, we may anticipate, will be our immunity from the disease.

But I must now bring these remarks to a close. Imperfect and incomplete as the account has been, I trust it may not have altogether failed in showing how much epidemic cholera is under our control. That, whatever may be its origin, its incidence, its prevalence, and its dissemination are subject to physical laws which, if duly observed and enforced, will protect us from that which, if uncontrolled by the exercise of the sense God has given us, may prove like the destroying angel of the Apocalypse. Happily we have acquired some knowledge of these laws, and it depends on ourselves and how we apply it as to what the results may be. Epidemics are not a necessary, though a constant, condition of man's existence on earth. They are amenable to the laws of hygiene and of common sense. "Let us," says Dr. Dallinger in a recent address respecting small-pox, "do our duty and act up to our knowledge, and as surely as disease comes among a people by physical laws broken, so it will depart from them if they see to it that physical laws are obeyed."

GENERAL HOSPITAL, BRISTOL.—The long contemplated enlargement of this hospital is now in hand. The plans include the erection of a nurse's home, a further development of the museum, and extensive internal alterations and improvements. The training of a staff of nurses to attend patients in their own homes will be one of the new features in the work of the institution. The estimated cost of the whole work is upwards of £10,000.

Address
ON
THE DUTIES AND REMUNERATION OF MEDICAL WITNESSES.

Delivered on March 18th, 1888, at the East London and South Essex District of the Metropolitan Counties Branch of the British Medical Association,

BY A. J. PEPPER, F.R.C.S.,
SURGEON TO ST. MARY'S HOSPITAL.

GENTLEMEN,—The subject of my address this evening will treat of the duties and remuneration of medical witnesses in connexion with legal investigations, and not simply, as your prospectus notifies, on "medical fees in the law courts."

First as regards the coroner's inquisition. You may be aware that the Coroner's Court is one of first instance, or in other words, one of preliminary inquiry, and for this reason it is not fettered by any special allegations which require particular proof. As you know, it is not only desirable, but legal, for general statements to be tendered and received in evidence which may not bear directly on the actual point of inquiry, the object being to arrive at the truth as to when, where, and by what means a deceased person came by his or her death. It is allowable to take statements which may elucidate the testimony of subsequent witnesses. This usage frequently leads to protracted investigations, which may be a source of regret and annoyance to medical men busily engaged with professional duties. It seems hard that you should be kept, perhaps for several hours, in attendance at an inquest whilst a long and discursive conversation is carried on between the coroner and a number of common witnesses. The irregular statements above referred to are inadmissible as evidence to be placed before the jury upon which they are to found their verdict. A medical witness should cultivate the habit of dissociating facts and the inferences he draws from them from statements he may think it advisable to make to illustrate and explain what may be termed necessary evidence. Scientific witnesses have this exceptional privilege. They are not compelled by the rule of law to confine themselves to facts immediately within their knowledge, but may give their opinion upon the evidence of others as regards the subject with which they are particularly conversant. I cannot too strongly exhort you to carefully and scrupulously weigh the value of such evidence, since from the very nature of things the jurors are not competent to challenge it, and, being only an expression of *belief*, it would be difficult, if not impossible, to frame a charge of perjury upon it. It seems to me, however, that the danger lies more in the direction of a medical or other scientific witness erring by way of unintentionally using equivocal or ill-considered expressions to cover defective knowledge, than by his yielding to the temptation to tell a wilful falsehood. As a matter of fact, the medical practitioner is expected to be deeply versed in all the complex problems of life and death, and to be able to give a full and satisfactory answer to every question that the ingenuity of a lawyer or the self-consciousness of a juror can suggest. If he hesitates in his replies or qualifies them by alternative propositions, he is accused of ignorance, a desire to parade real or imaginary knowledge, or of intent to mystify and mislead the court. I have on several occasions incurred displeasure and opprobrium for persistently refusing to give a plain "Yes" or "No" to a question at once complex and involved. This unreasonable demand is more likely to be made at criminal trials and in the superior courts, where special pleading is at a premium, than at inquests where counsel learned in the law are received only with the toleration they deserve. From a not inconsiderable experience of the procedure in our judicial courts, I have come to the conclusion that a well-conducted inquest may be taken as the type of what is best and just in legal investigation.

Turning now to the consideration of some of the obligations and rights of medical witnesses, let me note, in the first place, that a coroner has the power invested in him by statute to compel a medical man to make or assist in making a post-mortem examination, and to appear to give evidence from the knowledge thereby obtained. Or he may direct a summons to be issued for attendance as a witness only. It is well to remember that the requisition to be binding must be in writing: a verbal message from a coroner's officer would not warrant the enforcement of penalties, although as a matter of policy it is inadvisable to ignore it, except for very special reasons. It rarely happens that a coroner refuses to remunerate a medical witness simply on the grounds that he was not formally subpœnaed. The moral as contrasted with the legal obligation seems to meet with more favour in the coroner's than in the magistrate's court.

As a coroner is enabled to compel attendance, so is he compelled, immediately on the conclusion of the inquiry, to pay the fees fixed by statute—that is, a guinea for making a post-mortem examination, and a guinea for giving medical evidence. It is the practice of some coroners to allow a fee for each day of attendance, although this is certainly the exception, and rightly so, for the magistrates before whom the coroner's accounts are presented can strike out anything beyond a guinea, which is the minimum and maximum fee paid by law for the attendance and evidence of a medical man at an inquest on any one body. In cases of exceptional difficulty and length the coroner will sign a recommendation, and get it endorsed by the jury, that additional remuneration be made, and in such circumstances it is not customary for the magistrates to refuse to pass the account; but occasionally, on the belief or pretext that their first and only duty is to keep tight the public purse strings, they will require that the coroner shall be held responsible for the extra expenditure. This of course means that the medical man is in duty bound to return his hard-earned pay without hope of seeing it again, for it is foolishness to suppose that an appeal to the chief authorities will meet with more than a courteous refusal. On one occasion the coroner allowed me a special fee for conducting a peculiarly difficult inquiry, including a microscopical examination and chemical analysis; but my possession of the solatium was short-lived. In another case I undertook a similar duty on the coroner promising to make an application on my behalf to the Home Office. The liberal Secretary of State made answer that there was no fund out of which he could advise a grant. It may be true that there is no special fund for the purpose; at the same time the Home Secretary can, if he thinks fit, sanction the payment of a special fee, which is equivalent to its being paid. The practical lesson to be learned is to obtain the order beforehand. Unless you are willing to work for pure love or charity, you had better do no more than the law demands, and for the fixed sum which it entitles you to receive.

If the majority of a coroner's jury are not satisfied with the evidence of a medical witness, even although he has made an examination of the body in accordance with the terms of the official summons, they can sign a requisition to the coroner for a second examination to be conducted by another medical man. This requisition the coroner is bound to act upon, or he lays himself open to a charge of misdemeanour.

According to Section 5 of the Statute 6 and 7 William IV., cap. 89, when any inquest be holden on the body of any person who has died in any *public hospital or infirmary*, or has died in any *county asylum or infirmary*, whether the same be supported by endowments or voluntary subscriptions, then in such case nothing can be construed from this to entitle the medical officer of such institution to the fee or remuneration marked in the same Act Sect. 3. For a long time it had been a matter of contention as to what constituted "a public infirmary," but the question did not receive judicial consideration until March 31st, 1885, when an action was brought in the Croydon County Court by the medical officer of the Croydon Poor-law Union against one of the coroners for Surrey for the sum of two guineas, being the fee for making a post-mortem examination on the body of a man who had died in the infirmary, and for giving evidence at the inquest subsequently held upon the body. Each side was represented by counsel. After a lengthy argument the judge decided in favour of the defendant, holding that a *workhouse infirmary was a public infirmary*. This judgment has not been appealed against, although an attempt was made to collect funds for that purpose. In the interests of our profession the decision is an important one, and it is matter of regret that it has not been challenged in a superior court. As a corollary to the above exposition, I

may add that a house surgeon or resident medical officer of a hospital or public infirmary is bound to make a post-mortem examination of the body of a person who has died in the institution, and to give evidence at the inquest without remuneration. If he refuses he renders himself liable to a penalty of £5, which is enforced as follows. The coroner or any two of the jury make complaint "to any two justices having jurisdiction in the parish or place where the inquest under which the order issued was held, or in the parish where such medical practitioner resides," whereupon the justices are required to proceed to the hearing and adjudication of such complaint, and if upon conviction the offender refuses to pay the fine, it can be recovered by distress and sale of his goods. The Coroner's Court being a Court of Record, has the power to punish for contempt if committed *in court*; that is to say, the coroner may commit any person who obstructs or impedes him in the performance of his duty, or he may elect to punish the offender by fine or forcible removal.

Before dismissing the question of medical evidence at inquests, let me counsel you, if you have the least suspicion that a death has arisen through foul play, not to make a post-mortem examination without a coroner's order. The relatives of a deceased person may importune you, from sinister or other motives, to aid them in avoiding an inquest, but do not yield to their solicitations. Remember that the harbouring a doubt as to natural death places you under the moral obligation to communicate with the coroner, who must then act upon his own responsibility. Your duty ends with laying the information before him. The body then passes legally into his possession, and he can proceed against you for what is technically known as committing "an assault upon the body." Again, if death occurs suddenly in a person known to have suffered from a fatal disease, it is politic to write the facts to the coroner, and inform him that you are prepared to give a certificate, with his sanction. By carrying out these recommendations in your practice you may save yourselves much annoyance, and steer clear of innuendoes or charges of being interested in a cause in which there is neither reason nor warrant for taking action other than upon public grounds.

Allow me now to direct your attention to a few points in regard to the collection of evidence and its preservation in a form in which it would be received in any court of law. In the majority of instances the general practitioner's experience of forensic work is gained at inquests, but not unfrequently criminal charges arise out of the findings of coroners' juries, and medical men, in common with other witnesses, are bound over in a sum of £40 to appear at the trial whenever the coroner commits a person. Now, it rarely happens that a prisoner is committed on the coroner's warrant alone; it would be better if the duties of the Coroner's Court ended in recording the finding of the jury, for in nearly all cases a magisterial inquiry takes place, and at this also the medical man appears as a witness. In both cases, as you know, his statements are taken down in writing, and it is highly important that they should not differ in the two courts. To avoid this it is advisable to make notes at the time of the post-mortem examination, if only in the form of *memoria technia* for after-elaboration. The written report should be completed as soon as possible whilst the facts are still fresh in one's mind. The original notes made at the time of the examination should be preserved, for at the trial it is not uncommon for the court or counsel to demand their production; and if they are not forthcoming, disparaging remarks on the witness's sincerity or veracity are sure to be made. It is highly desirable, however strong may be the opinion of a medical man of the merits of the case in which he is engaged, that he should not display the least animus. Let him remember that as a scientific witness he stands in a position of assessor to the court, and not as an advocate. Both at inquests and at courts of criminal investigation the jury must be largely guided by medical evidence, and it is only just that such evidence should be clear, concise, and expressed in the simplest terms. A medical man may be called upon to give evidence at a police court under a variety of circumstances. I will relate to you a case which occurred quite recently. A medical practitioner was directed by a justice of the peace to visit and examine a person *not being a pauper* who was reported to be of unsound mind and not under proper care and control. In some way or other the relieving officer to the board of guardians became connected with the case. The medical man, upon delivering his report, applied to the guardians for his fee, expecting to be paid by them as in the case of pauper lunatics, but the guardians repudiated the claim. He then applied to the magistrate, and was referred by him to his clerk. The clerk admitted the justice of the claim, and advised the clerk to the board of guardians to pay the fee, but the latter remained obdurate. It would be difficult to imagine a harder case, for he was compelled under a penalty to obey the order of the justice of the peace. My object in placing this case before you is to prevent you falling into a similar dilemma. A scale of fees for medical witnesses is kept at every police court. This scale is framed by the Secretary of State under power given him by statute.

Take care before you act upon a magistrate's order that he understands the conditions under which it is made. At the same time there can be little doubt that the guardians are bound to pay on a magistrate's order for the medical examination of a person supposed to be of unsound mind. In cases of assault or violence a medical man may be requested by the police or others to render professional assistance. On grounds of humanity you would scarcely refuse to attend; but you would be acting entirely within your right if you declined to give evidence before the magistrate unless formally summoned. And I advise you in this matter to stand by your rights; for if the charge be preferred by one individual against another, and not by the police authorities, the magistrate will not unlikely refer you for your fees to the party on whose side you appear, and such party may not have the means to pay you. The fee for attendance of a medical witness before a magistrate as allowed by the court is 10*s.* 6*d.* for each day, or £1 1*s.* if more than two miles distant. Whilst speaking on the question of fees of medical witnesses, I may state briefly the practice which obtains in other courts than those already mentioned. Unfortunately, there are few definite regulations, the fees varying not only in particular courts, but in courts of the same character, at the discretion of the judge or other official. Take, for instance, the County Court. Here the fee for each attendance varies from 10*s.* to £1 1*s.* I am indebted to a judge of one of our largest County Court districts for kindly furnishing me with information which I may tabulate as follows. 1. A medical man succeeding as plaintiff or defendant in an action gets the same costs as any other party. 2. In this court £1 1*s.* is allowed for each day's attendance, and if the medical witness objects to be sworn before his fee is paid the objection is allowed. 3. A medical man called as a professional witness looks to the party who calls him for his fees; if the party who calls him succeeds, such party recovers, if he can, the sum allowed on taxation from the unsuccessful party. 4. The only scale fee in this court is £1 1*s.*, but the taxing officer may allow a higher fee for scientific witnesses. This is not a matter for the judge unless an appeal be made from the taxing master.

I may mention that if a medical witness means to insist on having his fee before giving evidence, he must do this before he is sworn, otherwise the objection would not be sustained by the court. In civil trials the judge, as a rule, readily assents to the witness's proposition, since he knows that if a party shows unwillingness to pay the fee before the evidence is tendered, there is every probability of his not paying it at all. Moreover, he knows that when a man is compelled to give evidence under protest, he does not make the best of witnesses; he may give the truth, the whole truth, and nothing but the truth, with legal exactitude; but then, you know, there are different ways of speaking the truth—it may be done with or without embellishments. In criminal charges the judge is less tolerant of a witness's objection to be sworn, since the prisoner's liberty, or it may be his life, is at stake. If a medical man suspects beforehand that the payment of his fee is problematical, he should inform the party who intends to call him, some days before the hearing or trial, that he will appeal to the court for permission not to be sworn until he receives a written guarantee, or a verbal pledge made openly in court by a solicitor, to the effect that the stipulated remuneration shall be forthcoming. Not long since I took a written security in court for my fee, and although my client obtained the verdict, I learned subsequently that he would have paid me only one-fifth the amount had I not possessed a legal claim against him.

The question of fees is sometimes a delicate one, and requires some tact in dealing with. From a varied and not

trifling experience, I can say that you may safely ask for a guarantee from a solicitor that your charges will be met by him if the principal fails to carry out his contract. If a solicitor tries to satisfy you with a verbal promise, you should strongly suspect his sincerity. Of course I am not referring to individuals or firms known to the medical man as of good repute, because in that case you may place implicit confidence in their honour, their word being as good as their bond. In any case, however, it is well that the exact amount of the fees should be agreed upon and particularised, whether for consultations, examinations, or attendances and giving evidence in court. If a solicitor has a client of doubtful solvency, he will insist upon having your fees paid before requiring you to act. A solicitor acting for a client cannot be sued as a principal.

There is another caution that may not be untimely or misplaced. You are aware that the Employers' Liability Act enables a man to claim compensation for personal injuries received through the carelessness or negligence of his employer personally or by his agents. Obviously the greater number of claimants are persons likely to seek advice and aid at hospitals and dispensaries. You would be mistaken if you supposed that their questions as to the nature, extent, and probable duration of their injuries were free from guile. Having got the information they desire from the medical man, they ask, with every appearance of innocence, for a certificate. Whenever I have the least suspicion, and in fact in nearly every case of the kind under consideration, I ask the patient, "Are you going to bring an action for damages." If I receive an affirmative answer, I refuse to give a certificate, and take care to have no particulars beyond the patient's own complaint placed on the prescription paper. If he is an in-patient, I give orders that the note-book shall be kept from inspection by the patient or his friends. The same warnings serve, though with less force and frequency, in private practice.

Medical men are sometimes requested to arbitrate singly, or in conjunction with another, in cases where compensation for damages is claimed for injuries sustained by accident. The reference may be made informally or at the instance of a superior court, both parties agreeing to the course, or by virtue of some special Act, such as that of the Railway Passengers' Assurance Company. In the two latter instances witnesses can be examined on oath, and the litigants are usually represented by counsel. The arbitrators make their award with or without the assistance of an umpire. This award should be kept by the umpire or an arbitrator. It is better for the award to be drawn up by a solicitor in technical form. Either party to the suit can claim the award on payment of the arbitration fees. If you are called upon to act in the capacity of arbitrator, you will, of course, take care not to divulge beforehand the terms of the award, or both plaintiff and defendant may decline to take it up, and thus deprive you of the fee.

Just a few words about medical fees in the superior courts.

In the High Court the allowance is £1 1*s.* for each day's attendance, if the medical man be resident in the city where the cause is tried. If he lives at a distance, he is paid by scale of £2 2*s.* or £3 3*s.* for each day. This fee covers all personal expenses, but not travelling expenses. Where there is a railway it is customary to allow a first or second class return ticket. Sometimes travelling expenses are paid by mileage at the rate of not more than 3*d.* per mile by train, and not more than 6*d.* per mile by other vehicle.

In the Divorce Court the regulation fee used to be £1 1*s.* for an ordinary medical witness for each day's attendance, if he lived within five miles of the General Post-office. The court awarded £5 5*s.* or less per day for expert witnesses, and this included everything save travelling expenses. I am not aware that the scale has been altered since the removal of the court from Westminster to the Strand.

For attendance at Assize the fees are the same as in civil actions tried before the High Court at a distance from the witness's residence. There is an additional allowance of 2*s.* for every night the witness is kept away from home by the court. Sundays do not count, so a medical man may be summoned from London to Manchester on a Saturday, find his evidence is not required until Monday, and yet receive no additional fee for waiting on the pleasure of the court. This is clearly an injustice. It would be a great gain if a uniform and fixed scale of fees were drawn up for the various courts.

ON

EXTRACTION OF IMMATURE CATARACT.

BY JOHN TWEEDY, F.R.C.S. ENG.,

PROFESSOR OF OPHTHALMIC MEDICINE AND SURGERY IN UNIVERSITY COLLEGE, AND SURGEON TO THE ROYAL LONDON OPHTHALMIC HOSPITAL.

IN a short article on the "Extraction of Immature Cataract," published in THE LANCET, May 12th, p. 915, my friend Mr. Higgens calls attention to an interesting and important consideration in the practice of ophthalmic surgery. "Extraction," he says, "by ordinary methods has not been followed by a good percentage of success on account of the transparent cortex inevitably left behind, which afterwards becomes opaque and blocks the pupil, causes dense capsular obstruction, or sets up severe iritis, leading to closure of the pupil." As a persistent advocate at Moorfields and elsewhere of the practice of operating on immature cataracts in suitable cases, I should like to express my conviction that unripe cataracts may be removed as easily and successfully as ripe ones, and without much additional risk.

Towards the end of the year 1880 a man presented himself at Moorfields with a dense but circumscribed cataractous opacity about the posterior pole of each lens, the other portions being quite clear. Iridectomy was performed on the worse eye, with the view partly of helping vision, partly of hastening the ripening of the cataract, and partly of facilitating its ultimate extraction. The patient attended the hospital from time to time for many months in order to ascertain whether the cataract was "ready," but as no material change had taken place operation was from time to time deferred. At length he said that, as he had not been able to do any work for two years, and now had spent his scanty savings, he had made arrangements to go into the workhouse to wait till the cataract was "ready." This statement brought into painful prominence an impressive economical consideration which could not be lightly passed by. Having been told of the extra risks involved in extracting an immature cataract, he offered to submit to the operation if I were willing to perform it. Accordingly I did it. The extraction was uncomplicated, and the lens left the capsule entire. Recovery was prompt, and a few weeks later, with suitable glasses, the patient could read "brilliant" type fluently. He forthwith resumed his occupation as a compositor, and had had regular employment, when he returned to Moorfields some years later for the extraction of the other cataract, which had meanwhile become complete. Since that operation I have rarely refused to extract a cataract, no matter how immature, whenever *both* eyes were so affected that the patient was unable to earn his livelihood; and I have operated on such cases almost as often as they presented themselves.

Mr. E. T. Collins, late senior house-surgeon at Moorfields, has kindly prepared the following statistical report of the operations which I have done for the extraction of immature cataract. During the last seven years twenty-nine immature cataracts have been extracted. One eye was lost from late serous iritis and glaucoma, and was eventually excised. Two cases had severe iritis, and in one a small amount of vitreous was lost, but these three, and all the other cases, ultimately got good vision, except two which were found, after the operation, to have old vitreous opacities. Needling was required in thirteen of the twenty-nine cases.

It is no part of my present purpose to criticise the procedure which Mr. Higgens recommends. It does not seem very encouraging, since "in five out of the six cases vitreous was lost; in one case the amount was large." The success which so far I have had I ascribe entirely to the kind of operation which I have been in the habit of performing—namely, a corneal section upwards with a Graefe's knife, with an iridectomy, and a peripheral section of the capsule of the lens with the cataract knife, leaving the anterior capsule, as far as practicable, intact. By this means the lens is taken, as it were, out of a pocket. Any lens matter that may be left behind, or that may subsequently be formed, remains inside the capsule, which is accustomed to its presence, and where it does not set up irritation. The risks of iritis are thereby greatly lessened, and almost altogether obviated. Furthermore, while the lens matter which may be present inside the capsule cannot easily get

out into the anterior chamber, the aqueous humour can easily get in, and disintegration, liquefaction, and absorption in due time ensue, leaving often a perfectly transparent capsule. But if, after a reasonable delay, opaque matter still obstructs the pupillary area, the capsule may easily be torn through by a single needle, inasmuch as its natural fragility has not been impaired by previous instrumentation. A possible objection to peripheral section of the capsule may be answered by anticipation. "Secondary" cataract is not more frequent than when the face of the capsule has been torn by the pricker or *removed* by forceps. Perhaps it is not so frequent.

NOTES ON A CASE OF

SUPPURATING HYDATID, PROBABLY CONNECTED WITH THE LIVER; GASTROTOMY; RECOVERY.

BY EDWARD O. DALY, M.A., M.D. OXON., M.R.C.P.,
PHYSICIAN TO THE HULL ROYAL INFIRMARY.

T. C——, aged twenty-one, a fish-packer, was admitted into the Hull Infirmary on Aug. 6th, 1885, complaining of pain across the abdomen and in the back of seven weeks' duration. His abdomen had gradually enlarged during that period, and he felt quite sure that he was his usual size round the waist two months prior to admission. Previous to his present illness he had enjoyed excellent health. On examination the abdomen was found to be tender and greatly distended, the circumference at the umbilicus being thirty-nine inches. On percussion a dull note was obtained over the front of the abdomen; there was no bulging at the flanks, and in this situation the note was clear and tympanitic. The dulness and tympanitic note did not change with the position of the patient. On palpation distinct fluctuation could be readily obtained. There was some œdema of the legs, the urine was normal, and the heart and lung sounds natural. The day after admission he was tapped, and a pint of brownish fluid drawn off containing a large amount of albumen and bile. This fluid, which was quite sweet when first withdrawn, had a specific gravity of 1006, and on standing turned from a brown to a greenish colour; a large amount of sediment was deposited, which was found to consist of micro-organisms in countless numbers; there were also a few crystals of leucin and tyrosin. Prior to his being tapped it was thought likely that the tumour was a hydatid cyst; the character, however, of the fluid removed seemed to negative that idea. On Aug. 27th the tapping was repeated, twelve pints of similar fluid being withdrawn. The patient left the infirmary on Sept. 25th, and was readmitted in February, 1886, remaining an in-patient until May 31st. During this period he was tapped on three different occasions, seventy-eight pints of fluid being removed. The amount of bile diminished at each tapping; the albumen somewhat increased, but in other respects the fluid remained unaltered. His health continued remarkably good; the temperature was always normal; his weight, too, remained stationary. On July 6th, 1886, he was readmitted for the third time. Thirty-six pints of fluid were withdrawn and the abdomen carefully explored. No enlargement of the liver could be made out, and no solid growth of any kind discovered. The fluid very rapidly reaccumulated, and in a week or ten days he was as big as ever, his circumference at the umbilicus being forty-five inches. As the patient was very anxious to have an operation if there was any reasonable hope of success, a consultation was held as to the advisability of opening the abdomen. The patient's health, however, seemed so good, and the diagnosis so uncertain, that such a proceeding at that time was hardly thought justifiable. Towards the end of September he developed signs of peritonitis, with marked elevation and remission of temperature. A small quantity of fluid was removed, which for the first time was offensive. It was therefore at once decided to open the abdomen. The fluid was completely removed, and along with it shreds of membrane resembling plum-skins, which on examination were found to be pieces of hydatid membrane. The cyst cavity was then washed out with some antiseptic, and a drainage tube inserted. The patient made a rapid and complete recovery.

The following are the chief points of interest in connexion with this case:—1. The large size of the cyst, which filled the greater part of the abdomen. The cyst must either have been barren or contained only a very limited number of secondary or daughter cysts, since a comparatively small amount of membrane escaped with the fluid at the operation. No hooklets or echinococci were ever discovered in the fluid after careful examination, and it is quite probable that the cyst did not advance to that stage of development in which echinococci are formed. The examination, therefore, of the fluid withdrawn from a barren hydatid cyst in which suppuration has taken place does not necessarily assist one in arriving at a correct diagnosis. 2. Although the liver was never definitely made out to be enlarged, either before or at the operation, the cyst was most probably connected with the liver; it at any rate at one time communicated with one of the bile ducts, as a considerable amount of bile was found in the fluid, especially in that from the first two tappings. It was, I take it, the presence of a considerable amount of bile which kept the fluid sweet after the cyst had suppurated and destroyed the pus-corpuscles, so that none were ever made out microscopically. 3. The case shows the non-advisability of continuing to aspirate a cyst that has been tapped two or three times and quickly refills. The removal of the fluid from the cyst diminishes the pressure, and so an effusion of serum takes place within its capsule from the vessels that supply it. The consequence is that the fluid removed in the later tappings is largely composed of albumen, which the patient is ill able to dispense with. 4. How can the sudden offensiveness of the fluid be best explained? There seem two possible causes for it: either it depended on the needle used at the last tapping being septic, or on the removal of all the bile from the fluid of the cyst (no trace of which could be detected at the last tapping). The antiseptic properties of bile are well known. It may be, therefore, that as long as there was any bile in the fluid it remained sweet; as soon as it ceased to exist the fluid became offensive. Perhaps both these causes had a share in the matter.

THE FUMIFIER:

A DESCRIPTIVE ACCOUNT OF ITS CONSTRUCTION AND USE.

BY ROBERT J. LEE, M.A., M.D. CANTAB., F.R.C.P.

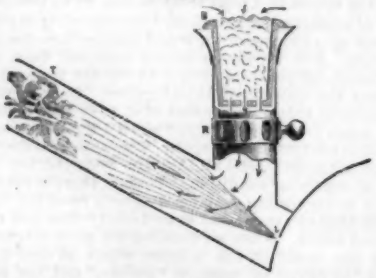
MOST substances which exist naturally in the form of fluid may be converted by heat into the form of vapour, and likewise many substances existing naturally as solids may be changed by heat into "fumes" or "smoke." For therapeutic purposes there are differences between the change of condition alluded to, as it occurs in the two cases, which are deserving of consideration. Taking opium by way of example, we perceive that we cannot convert it into vapour by making a solution of it and then boiling. The water would evaporate and leave the opium as a residue. By heating opium to a high temperature, as in the ordinary method of smoking, the substance is converted into the form of vapour by a process of slow and more or less destructive distillation. The vapour or smoke obtained from opium, thus treated, differs from opium in certain respects which have been the subject of investigation. It is enough for our purpose to recognise the fact that the result is different in such a case from that obtained when a fluid such as water or alcohol is converted into vapour. This vapour is chemically the same as the fluid, and all that has occurred has been a change of molecular condition. Though there is little or no difficulty in converting medicinal agents from the form of fluid into that of vapour, the same facility does not exist in the case of solids. When we consider the very extensive use all over the world of the tobacco plant in the form of "vapour," or rather of fume, or "smoke," and the less extensive use, in certain countries, of opium in a similar form, it may reasonably be asked whether the subject of the conversion of medicinal agents of well-known potentiality from the solid state to that of "smoke" is not deserving of attention, as affording us another mode of administering them therapeutically. The difficulty to be overcome is a very simple one. We require to support a slow process of combustion in the substance under treatment which is practically a process of destructive distillation; and just as in the pre-

paration of gas from coal the heat is carefully regulated, and the changes taking place within the retorts are very different from those which occur in the ordinary burning of coal, so in the case of opium, stramonium, and other substances our object is to convert them into fumes by regulating the heat and limiting the supply of air, so as to change the molecular condition without destructive combustion. So far as the leaves, stalks, or other parts of medicinal plants are concerned, we may deal with them in the same way as with tobacco, and convert them into "fumes" by slow combustion—that is, by ignition, and by forced induction of atmospheric air. But substances like opium, calomel, arsenic, &c., which are not readily ignited, require to be treated somewhat differently. By combining them with some substance, such as pure carbon, as is done in the familiar instance of pastilles, the fumes of the substance can be obtained. It must be clear from what has been said that we can generally induce slow combustion in any substance if we have the means of promoting it by an induced current of air, and I propose to explain briefly how this may conveniently be done by the action of a small jet of steam. (Fig. 1 is a representation of the fumifler.)

FIG. 1.

By careful attention to the principle on which the steam jet acts when playing in the axis of a tube, as is shown in Fig. 2, we can induce combustion to take place in the way

FIG. 2.



represented. A current of air is induced to pass along the tube (T) in the direction of the arrows, and when any substance is placed in the bowl (B) and is ignited, the draught occasioned by the steam jet induces combustion to continue, the rate depending on the force of the jet of steam, by which the velocity or force of the air draught is caused and regulated, and by the quantity of air permitted to pass through the substance.

On some future occasion I may deal with the question of the advantages and disadvantages of treating maladies by the administration of remedies in the form of "fumes." At present we know something of the therapeutic value of opium, stramonium, and a few other agents in certain forms of pulmonary disorder. My object at present is simply to describe the best mode of obtaining fumes so that one can administer them with ease and accuracy. It appears to me that a wide field of inquiry is opened up to us by the possibility of administering many substances in the form of vapour or fumes, and that this form may in many cases be preferable to that of the solid or liquid.

In further explanation of the diagram, the use of the ring (R) may be pointed out. Its object is to control the draught by admitting more or less air below the chamber or cup (B), and thus diminish or increase the quantity passing through the ignited substance.

NOTES OF A CASE OF INTRA-CRANIAL TUMOUR.

BY H. MALLINS, A.B., M.B., M.CH. UNIV. DUB.

R. B——, aged thirty-five years, a carpenter by trade, came under observation in the year 1883. His father died, at the age of thirty-five, "of some kind of fits." His mother's age at death, the cause of which was bronchitis, was fifty-three. He was an only child. His wife says that three or four years previously he was a man of the most active habits imaginable, but that since then a marked change had slowly and gradually come over him: he had lost all his energy and had become quite lazy, and if he sat down on a chair for a minute or so was sure to fall fast asleep. During the year 1883 he came to me on several occasions, complaining of supra-orbital neuralgia of the right side, of no marked severity, the occurrence of which he attributed to the effects of a fall which he had some six years ago, when his forehead was severely bruised. On one of the occasions referred to he was asked if the pain ever affected the sight of the right eye in any way. He at once replied that it had been bad for a long time. On examination, it was found that vision on that side was *nil*. The eyeball was slightly more prominent than the left one. The pupils were equal in size, and normal in action. There was no ptosis or strabismus. With the opthalmoscope white atrophy of the right disc was observed, and a similar condition was noticed to be commencing in the left. With the exception of these neuralgic attacks, which commenced three years ago, and the defective vision of the right eye, the patient seemed perfectly sound. All the functions were normally performed, and there was no indication of loss of power or sensation. The reflexes were normal. The neuralgia yielded to ordinary remedies, and he returned to work. Nothing more was seen of him until Jan. 5th, 1884, when a decided change was noticeable. He seemed dazed, stupid, and remarkably drowsy. This drowsiness was by no means a new feature in his case, though it had much increased of late, and had earned for him amongst his fellow workmen a reputation for laziness which the sequel will prove to have been undeserved. Pulse very slow, 40. He had had numerous attacks of vomiting and severe occipital pain during a few weeks previously to being seen. The marked degree of drowsiness may be gathered from the fact that it was quite difficult to keep him awake while his eyes were being examined with the ophthalmoscope. The diagnosis of a brain tumour probably situated in the cerebellum was at this time made. On Jan. 23rd, 1884, having so far recovered from the attacks of pain and vomiting as to be able to travel, he went to the Eye Infirmary at Norwich, where Mr. Robinson kindly examined his eyes with the following result:—Right eye: Vision *nil;* optic disc atrophied; vessels small. Left: Vision = $\frac{1}{4}$ Jaeger; optic disc displays commencing atrophy; retina congested. During February he suffered a good deal from cough and dyspnœa, apparently of a catarrhal nature. The drowsiness continued, though it was not quite so extreme. A complaint of a curious feeling of weakness—a feeling as if the hip bones would come through the skin"—was at this time made. His wife thought he had become rather deaf of late. The following are the notes taken at the time:—

March 4th.—Decided convergent strabismus noticed to-day.

Is still deaf. Says that he feels all right but for want of strength.

18th.—Has been deaf for the last fortnight. A few days ago his speech became quite impaired for a short time, quite stuttering in character. Still suffers from occasional attacks of supra-orbital pain. His chief complaint is of general muscular weakness.

April 2nd.—Deafness and strabismus almost gone. Feels weaker from the knees downwards than elsewhere. Half an hour's work in the garden does him up, as, while working, a mist comes over his eyes which renders him quite blind.

On April 25th, he went up to London and was admitted into St. Thomas's Hospital, where he was for some time under the care of Mr. Nettleship and Dr. Bristowe, to whose kindness I am indebted for the subjoined particulars.

When admitted to the ophthalmic ward on April 25th, the following was the condition of the eyes. Right eye: No perception of sight; decidedly more prominent than left; pupil 3½ mm.; no direct action; indirect action fairly good; optic disc pale and opaque-looking; vessels normal; edges fairly well defined; ocular movements normal. Left: V=$\frac{1}{36}$; reads 4 Jaeger badly; pupil 3½ mm.; acts well to accommodation and light; optic disc pale, but not so pale as right, might almost pass for normal; vessels normal; entire loss of temporal half of field of vision. Intra-cranial tumour was diagnosed.

The man was admitted to Dr. Bristowe's ward on April 29th. While there he considerably improved, and soon ceased to complain of either headache or giddiness, and on his discharge expressed himself as feeling nearly quite well. His eyesight, however, underwent no change. Dr. Bristowe considered that the symptoms pointed to disease in the neighbourhood of the optic commissure, but that the absence of optic neuritis (even after the disease had been in progress for five years) was a strong point against the correctness of the view that a tumour existed.

June 5th.—Has just returned from hospital. Seems decidedly better; has very little drowsiness or headache; feels stronger, and has commenced his usual carpenter's work again.

Aug. 15th.—Has grown stouter; weighs 13 st. 8 lb.—a gain of a stone over last year's weight. His wife has not noticed any particular change in him of late, except that he sighs very deeply and frequently without reason. Appetite small. Has pain in his teeth occasionally. Works every day. No increase in drowsiness or improvement in sight.

Nov. 19th: Has not been so well for the last month. The drowsiness is beginning to increase again. It occasionally comes on while he is eating, and very frequently while he is at work, for which it renders him so useless that he is threatened with dismissal. Mentally, a decided alteration is observable. His temper has become much more irritable; he indulges in bad language before his wife—a most unusual occurrence,—and has lost his affection for her. His memory is also much impaired. Seems quite indifferent to the prospect of losing his employment. On Tuesday last, without saying a word to his wife, he took the train to Cambridge and visited a relative, on arrival at whose house he at once fell asleep, and slept nearly all the time he was there. Another new symptom has appeared of late, and that is a tendency to a sudden muscular spasm of the whole body, causing him to start forward for a moment. He still carries on his duties as parish clerk on Sundays, apparently without much difficulty, occasionally, however, making a mistake in answering the responses if his wife is not careful to accompany him. Is a good deal troubled with nausea and flatulence.

During the year 1885 the symptoms remained stationary, the only fresh one noted being a steadily increasing tendency to fall forwards when he remained standing for any length of time. He was obliged to give up his work early in May of this year.

Feb. 22nd, 1886.—Drowsiness, listlessness, and tendency to fall forwards increasing. The supra-orbital pain has been more severe of late.

April 5th.—Face is beginning to assume a very vacant look, indicative of increasing mental hebetude. Some difficulty is experienced in getting him to answer questions. The general muscular paresis steadily increases; he often passes urine in bed; and when walking round the room would often fall but for his wife holding him up. The drowsiness is more prominent than ever.

23rd.—Mind becoming more affected. A few days ago he walked a short way from the house with a kettle in his hand, fancying that there was going to be a school treat.

Jan. 4th, 1887.—As a proof of the non-impairment of the sexual function, it may be mentioned that his wife was yesterday confined of a very healthy-looking child. She considers that there has been a great change in her husband the last few weeks. His face and hands have become quite puffy and swollen. The sight of the left eye, which has been steadily failing, is now wholly lost. His gait has become very tottering and uncertain; a few days ago he fell forwards on the fireplace. The frontal pain is more constant, and numbness of both hands is constantly complained of.

Feb. 14th.—I was sent for to-day to see him on account of his noisy breathing. It had, however, become normal by the time of my arrival. When it becomes noisy his wife says that his neck begins to twist quite round to the left, while at the same time the left hand becomes clenched. He cannot walk now without help. Lies in a state of semi-unconsciousness, from which he can be momentarily roused by a loudly spoken question.

March 1st.—Asthenia steadily increasing. There is now decided ptosis of the right eyelid. Slight convulsive seizures occur daily.

18th.—Died to-day, after several days of deep coma, accompanied by marked stertor and Cheynes-Stokes respiration.

Permission to examine the brain having been with difficulty obtained, it was found to present the following appearances. The vessels of the scalp, diploë, dura mater, and pia mater were extremely engorged. On attempting to remove the brain in the usual way, it was found impossible to get a view of the cranial nerves before section of them, owing to an abnormal structure which, occupying the base of the cerebrum, was attached as by a root to the pituitary fossa. On severing this fibrous attachment no further difficulty was experienced. The upper surface of the brain presented nothing noteworthy, with the exception of intense venous engorgement. On exposing the base, however, a tumour, semi-cystic in consistence, light purplish in colour, measuring on the surface 2¼in. in greatest breadth, and 2¾in. in greatest length, and occupying the central portion of the anterior third of the brain, at once attracted attention. The basal surface of the growth was thickly coated with reddish semi-gelatinous lymph. With a little care it was found possible to isolate the tumour from its surroundings and lift it completely from its bed. Its dimensions were then seen to be much greater than was at first apparent, and it became clear that its upper surface had exercised considerable pressure on the corpus callosum, the tissue of which was obviously flattened out. This pressure had led to the absorption of all the structures immediately in front of the corpora albicantia. No trace of the optic commissure or nerves could be detected. Although the corpus callosum roofed in, as it were, the greatest bulk of the tumour, it was found to bulge out into the anterior cornua of both lateral ventricles, but much more so into that of the left. The attachment to the pituitary fossa displayed a distinctly fibrous character, pointing to an origin from the dura mater. The osseous tissue of the fossa itself was soft, and yielded to the pressure of the finger. The brain was forwarded to Mr. Shattock, the Pathologist of St. Thomas's Hospital, who kindly examined the structure of the tumour, and pronounced it to be a round-celled sarcoma.

Remarks.—There can be but little doubt that the disease found post mortem in this interesting case was of at least seven years' duration. The change in character from that of bustling energy to somnolent inactivity marks the initiation of that pressure on the cerebral vessels which a tumour so situated was bound to produce—a situation which affords a ready explanation of the absence of any one-sided paralysis until the very end. While at St. Thomas's Hospital it was considered that the symptoms pointed to disease in the neighbourhood of the optic commissure, probably of the nature of a tumour, but that the absence of optic neuritis was a very strong point against the correctness of that view, as was also the absence of any kind of paralysis. But may not atrophy of the disc without antecedent neuritis be sufficiently corroborative evidence of the existence of a tumour? In his work on Diseases of the Eye,[1] Mr. C. Macnamara describes a primary atrophy, the so-called "progressive atrophy of the papilla," the account of which tallies closely

[1] Diseases of the Eye, by C. Macnamara, F.R.C.S. Third edition, p. 449.

with the ophthalmoscopic appearances noted in the case now recorded, and in connexion with which occurs the following statement: "When we remember that pathological changes in widely different parts of the hemispheres, and also of other portions of the nervous system, as the cerebellum and spinal cord, as well as tumours at the base of the skull, have all been demonstrated to give rise to progressive atrophy of the optic papilla, we may well look anxiously to these cases for symptoms of cerebral disease or other grave nervous lesion." It is noteworthy that for so many years atrophy of the disc, great drowsiness, and slight trifacial neuralgia, without any sign whatever of paralysis, were the only indications of the existence of so grave a disease.

CASE OF ABSCESS OF THE SELLA TURCICA AND PITUITARY BODY.

SYMPTOMS; NECROPSY.

BY C. G. BATTISCOMBE, M.B., C.M. ABERD.

THE following notes may be of some use in the localization of cerebral diseases.

Sarah Ann B——, married, aged thirty-three, sent for me at 10 P.M. on Aug. 5th, 1887. She complained of a feeling of weakness and inability to walk or stand without some support; nausea; pain in the head, on the vertex, occiput, and in both temples and eyeballs; tenderness on pressure over the seats of pain, especially in the eyeballs; a sensation of itching in the scalp; noises in both ears, which she could not describe; a sensation of "sounds being a long way off"; photophobia; thirst, and loss of appetite. She had been married for two years to a coachman, but had had no children. Six months previously she had what she supposed to be a miscarriage, losing at the time a good deal of blood. Catamenia regular every month. Except for occasional attacks of facial neuralgia she had enjoyed fairly good health. About four months after this she suffered from frequent headaches which she could not account for, but was not confined to bed until the day I first saw her. There was no history of gout or rheumatism, and beyond the supposed miscarriage and headaches no history of anything like syphilis, as far as I could discover. I had some difficulty in getting the above information, as she was very disinclined to talk. I could gather no history of syphilis on closely questioning the husband. She was a tall and fairly well nourished woman, having a heavy look in her eyes and a sallow complexion, the cheeks being inclined to flush below the eyes after she had been talking. She turned her face from the light and kept her eyelids closed. When asked to open her eyes she shaded them with her hand. Vision was good. She had not noticed any defect in her sight. Bowels rather confined. Tongue thickly coated with a creamy fur. Temperature 100°; pulse 98.

Aug. 6th: Pain in the occiput and vertex better. Pain in eyeballs and temples no better. Photophobia marked. Conjunctiva reddened. The patient has been out of bed and feels stronger. Very thirsty. Takes nourishment with difficulty on account of nausea. No sickness. Temperature 101°; pulse 90, steady, full, and compressible. Bowels acted after a dose of calomel.—7th: Pain in vertex returned. Conjunctivæ red. Photophobia severe. Tongue thickly coated. Pain in eyeballs and temples. Bowels acted without medicine. Began to menstruate. Temperature 103·6°; pulse 90, steady, regular. She takes milk, soda-water, eggs, beef-tea, broth, and ice fairly well. Less nausea.—8th: Pain in vertex and occiput very slight. Complains chiefly of an itching sensation in these parts. Pain in orbits and temples severe. Conjunctivæ a good deal congested. Photophobia very severe. No delirium. No squint. Vision good, as far as I could ascertain with the photophobia present. Temperature 100·4°; pulse 92, steady, full, regular. Menstruating freely; normal in amount and time—i.e., one lunar month since last catamenia.—9th: Photophobia very severe. I made a shade for the eyes and lightened the room, which had been darkened as much as possible. No pain in the head, except in the eyeballs, which is of a constant, dull, aching character. Every now and then she complains of a sharp, darting pain in the eyeballs and temples. She is decidedly more deaf, and unwilling to talk, but the noises in the ears have ceased. Tongue much the same. Bowels unrelieved. Still menstruating. Temperature 98·6°; pulse 80, regular, full. She sleeps badly; is restless.—10th: I removed the shade from her eyes, and darkened the room, as she could not stand the pressure on her forehead. Photophobia intense. Conjunctivæ much congested. Slight chemosis. Sight good. No amount of contraction of field, as far as I could make out, but tenderness of eyelids. The spasmodic contraction of the orbicularis and intense photophobia rendered any examination of the eyes very painful for the patient and difficult for me. Bowels acted twice. Menstruating. Temperature 103°; pulse 96, regular, much the same as previously.—11th: Patient had a very restless night. Orbital pain very distressing. Eyeballs extremely tender. On opening lids said she could see me distinctly, and could see across the room as usual. Conjunctivæ much inflamed, and more chemosed than yesterday. Tongue moist, and furred round the edges and back, dry and brown down the middle and at the tip. She is very thirsty, restless, and does not answer unless addressed loudly, and then in monosyllables. Temperature 99°; pulse 84, regular, full.—11th (5 P.M.): Both the upper eyelids are œdematous. Conjunctivæ of both eyes are more inflamed and chemosed than in the morning.—12th (7 A.M.): Patient is very low; complains of great pain in both eyeballs; cannot bear them to be touched. The upper lids are very œdematous and inflamed, the inflammation extending to the eyebrows and upper and outer margins of the orbits. Conjunctivæ very chemosed, and protruding between the partially closed lids in long folds. On gently opening the lids, the swollen conjunctivæ bulged out, covering the corneæ. I uncovered the pupils and she said she could see me indistinctly. Tongue dry and brown all over. Temperature 102·4°; pulse 120 (about), irregular, dicrotic, and small. Bowels acted loosely. Still menstruating slightly. At 11 P.M. the inflammation had extended to both temples and forehead. Eyeballs protruding, and conjunctivæ hanging in folds about a quarter of an inch in depth between the lids. The patient is quite conscious, but very unwilling to speak at all. I opened the lids, and she said she could not see me, but could distinguish bright light from semi-darkness, as when the curtain and blind were drawn and withdrawn. At 3·30 P.M. my partner, Mr. Wade, saw the patient with me. She was then semi-conscious, and only moved or took any notice of our presence when the eyes were touched. Skin cold and clammy. Respiration quick and shallow. Pulse small, irregular, and fluttering. Upper and lower lids of both eyes much inflamed and œdematous; the folds of the conjunctivæ between the lids brown and dry. Herpes on the upper lip. Tongue dry and brown. She could not be roused to speak, and was evidently sinking. Passing rapidly into a comatose state, she died shortly before 9 P.M.

The chief symptoms were the following: Pain in the head over the vertex and occiput and in both temples, that in the two former ceasing on the third day, and that in the latter persisting more or less throughout. Pain and tenderness in both eyeballs, and photophobia, not very marked at first, but increasing and becoming very severe at the end. Slight deafness in both ears—increasing, but never very pronounced. Inflammatory swelling of upper lids, commencing on the sixth day and rapidly increasing, the swelling eventually extending to the temples and forehead. Chemosis, commencing on the fifth day and increasing, so that on the seventh day there were long folds about a quarter of an inch in depth protruding from between the lids and projecting over the surface of the eye when the lids were opened. Sight continuing good, as far as I could ascertain, until the last few hours. Almost sudden collapse of the patient during the last twenty-four hours. The irregular temperature and regular pulse until the last day.

Inflammation within both orbits and pressure on the orbital vessels (probably from a collection of pus), was the only diagnosis Mr. Wade and I could arrive at. Cause unknown.

With the kind assistance of Mr. Shannon I made a post-mortem examination on Aug. 13th. I found well-marked rigidity. The body was well nourished. There were no syphilitic or other scars. Teeth good. Hair of head, fine, black, thick, and very long. Swelling of lids much diminished. Dura mater not adherent. Blood in the sinuses fluid and abundant; vessels congested. On dividing the optic nerves, the pituitary body separated immediately, and was left behind the sella Turcica. The fold of the dura mater over the top and sides of the sella Turcica had a greenish velvety

appearance, and bulged inwards both from above and on either side. On the left side near the inferior division of the third nerve there was a slight oozing of a brownish fluid; the discolouration of the dura mater spread downwards from this point over the petrous bone. On opening the sella Turcica above and at the sides, a quantity of extremely fetid pus escaped, together with portions of the pituitary body. One portion was the size of a large pea, and contained pus. The bony surface of the sella Turcica was denuded and rough. The point of the scalpel did not pass into the sphenoidal sinuses. The internal carotids were both somewhat pressed upon by the bulging sides of the abscess, but lay in their grooves by the side of the sella intact. The optic commissure must have received some extra pressure, as it indented the bulging dura mater which enclosed the upper and anterior part of the abscess. The vessels coursing over the pons Varolii were congested. Some portion of the pus had probably escaped through the optic fissure, as the walls of the abscess closely surrounded the posterior part of the optic nerves as they passed out of the skull. The dura mater at this point was very thin and friable. The other regions of the brain appeared normal. No further examination was permitted.

THE TREATMENT OF CLUB-FOOT BY IMMEDIATE RESTORATION OF THE PARTS TO THEIR NORMAL POSITION AFTER TENOTOMY.

BY W. J. WALSHAM, F.R.C.S.,
ASSISTANT SURGEON TO, AND SURGEON IN CHARGE OF THE ORTHOPÆDIC DEPARTMENT AT, ST BARTHOLOMEW'S HOSPITAL.

IN THE LANCET of Feb. 18th, 1888, Mr. Marsh calls attention to the rapid method of restoring the foot to the normal position after tenotomy. He justly says that "much difference of opinion at present exists as to the best method of treating talipes," and that "this can only be determined by the test of practical experience." Setting aside the question of syndesmotomy, the open division of ligaments and tendons, and tarsectomy, there may, as regards the restoration of the foot after tenotomy, be said to be three chief methods in vogue—(1) the slow, in which the ends of the tendon are placed in contact for a few days, and after union has taken place the new material uniting the ends is slowly stretched; (2) the rapid, in which a slight interval is left between the ends of the tendon and the foot placed in plaster-of-Paris for a week, after which the plaster is reapplied twice or thrice at intervals of about a week, the foot on each occasion being forced into a better position; and (3) the immediate method, in which a considerable space is left between the ends of the divided tendon, the foot being at once secured in the normal position in plaster-of-Paris. That in the employment of the last method much time and consequently expense is saved the patient is beyond question. It is therefore of importance to determine whether it is as safe, and the results obtained by its use are as good as those which follow the methods of gradual and rapid extension. Although I have only recently become a convert to the immediate plan, I have treated a considerable number of cases in this way in the orthopædic department at St. Bartholomew's Hospital. It may therefore be of interest, since attention has been drawn to the subject in the article above referred to, to make known the result of my experience in the immediate method.

On my appointment to the charge of the department, now nearly six years ago, I at first followed the teaching laid down in the text-books on orthopædic surgery, and employed exclusively the slow method of treatment. The delay and difficulty, however, in obtaining the expensive apparatus necessary for such treatment in the class of patients who attended at the hospital was such that I soon abandoned the use of all forms of Scarpa's shoe and the like, and substituted for them plaster-of-Paris. I still, however, continued the plan of placing the foot in the deformed position with the ends of the divided tendon in contact until the puncture had healed and reparative material had been formed between them. As my patients were only seen once a week, it was frequently found, on removing the plaster bandage, that the reparative material was so firm that considerable difficulty was experienced in stretching it, and thus improving the position of the foot. Indeed, where the deformity was extreme, the progress made was often so slow that the tendon had again to be divided before the restoration of the foot to its normal state was completed. To overcome this difficulty the foot was, after the tenotomy, placed in a slightly improved position, with the ends of the divided tendon a very little apart, since I still feared that, if much space was left between them (as taught in the authoritative works on the subject), they would not unite, or that the uniting medium would remain weak and elongated, and a worse condition result than that for which the treatment had been undertaken. As it was found, however, that when the ends were slightly separated abundant and firm material was produced between them, and no evil of any kind followed the practice, confidence was gained, and little by little the space left between the ends was increased, till finally the foot was at once placed in the normal position, leaving as much as half an inch to three-quarters of an inch or an inch, or even more, between the divided ends. I briefly record this experience as showing that I have not hurriedly abandoned the until recently orthodox method of the slow treatment of talipes, and that the so-called rapid method was not, if I may so speak, given up, but gradually became more and more rapid, till finally it passed by insensible degrees into the immediate treatment.

That the rapid method is a great improvement over the slow there can, I think, be little doubt, and that the immediate is a still further improvement over the rapid I feel almost equally sure, although on this point I do not like to be dogmatic, as my cases thus treated, though numerous, are far less than those treated by the rapid plan. Accurate notes are kept by my dressers in the department of all the cases there admitted, and I can so far affirm that hitherto there have been no untoward results. In no case has the tendon failed to unite, and in no case has the uniting material remained weak and elongated. I have looked over my note-books, and may quote the following as the general wording of the note on the removal of the plaster bandage: "Abundant formation of firm reparative material between the divided ends; foot in excellent position." My plan has been to divide the tendon; break down any adhesions by forcible but gentle wrenching; close the puncture in the usual way with a dossil of lint soaked in carbolic oil or with iodoform gauze; carefully enclose the foot in a domett or cotton-wool bandage according to the age of the patient, and secure it in plaster-of-Paris. For infants a cotton-wool bandage is invariably used, and with this there need be no fear either of disturbance of the circulation of the foot or the formation of pressure sores. Unless any swelling of the toes should call for earlier removal, the plaster is left on for ten days or a fortnight, to ensure the parts being kept at perfect rest and the formation of abundant and firm reparative material. The advantages of the immediate method as well as of the rapid method over the slow are—(1) great saving of time, and (2) the doing away with the necessity of an expensive extension apparatus. The disadvantages which I found attending the rapid, but which do not apply to the immediate, are—(1) that considerable pain is often caused by the force which has to be employed in stretching the uniting material at each changing of the plaster, and (2) that in severe cases the reparative material cannot always be stretched sufficiently to overcome the deformity, and it is occasionally necessary to redivide the tendon. I am aware that the immediate treatment is advocated by several excellent surgeons, but as far as I know it has not met with general favour in this country.

A NEW INFIRMARY, ABERYSTWITH. — The new Aberystwith Infirmary and Cardiganshire General Hospital was formally opened a few days ago by Colonel Pryse, chairman of the trustees. It will accommodate twenty-four patients, and has cost £4600. The Charity Commissioners paid out of the capital of the fund £2161, the Countess of Lisburne subscribed and collected £1198, and the trustees had effected a saving of £1272, which made the total required—£4631. The hospital has been erected on the best modern improvements in respect to its accommodation, drainage, and ventilation.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

OBSTRUCTIVE ANURIA FOR FIVE DAYS; COPIOUS DIURESIS; RECOVERY.

BY H. E. COUNSELL, M.R.C.S., L.R.C.P. LOND.

THE following case will, I think, be read with a considerable amount of interest.

S. C——, aged fifty-five, a very stout, big-made agricultural labourer, has passed renal calculi at various times during the last ten years. He has also been the subject of a large omental hernia in the left scrotum. His last attack of renal colic in the right side was a year ago, since which time the attacks have always been confined to the left side. On Jan. 15th a severe attack of pain came on in the left side, shooting down into the scrotum, and the rupture, which had been increasing in size since the previous Friday, became much more swollen. His bowels, usually open every day, had not been moved since the Friday night, and he had not passed flatus since that time. On the 16th he commenced vomiting bilious matter, and had only passed an ounce of urine during the previous twenty-four hours. At 4 P.M. he passed flatus, but I gave him some chloroform and thoroughly examined the rupture, which was quite irreducible. As soon as he had recovered from the chloroform he passed half a pint of urine, and during the next four hours passed two pints. All went well until the 18th at midnight, when severe pain came on in the left side soon after micturition, and from that time until 2 P.M. on the 23rd he never passed a drop of urine. On the 20th, after forty-eight hours' suppression, he was rather drowsy, but in no pain; there was no urine in the bladder, and he did not want to micturate. He was quite sensible and cheerful. He perspired slightly, had slight headache, the pupils were very contracted, and the tongue was dry and brown. Temperature 98·4°; pulse 70; respiration 25. On the 21st, whenever he fell asleep his face twitched and his limb jumped so much that he was constantly aroused. The bowels were open. Severe itching came on. As he had passed urine after chloroform during the first slight attack, I gave him some more, but without any good result. On the 22nd he was in the same state and very cheerful. Pulse 80; respiration 20. On the 23rd, at 11 A.M., the twitching was rather more pronounced, and occurred now when awake. He also complained of temporary defects in vision, which I attributed to spasm of his ciliary muscles. I could not see any retinal hæmorrhages, and the discs looked normal. At 2 P.M. he passed half a pint of clear urine without blood, and had no previous pain. Ten minutes later he passed another half-pint, and in ten minutes more a third. He then returned to bed, but in half an hour got up and passed about half a pint, and this went on all through the night and following morning. There was generally half an hour between each act, and usually half a pint was voided at a time. All the urine was quite clear, except that passed at 8 P.M., which contained bright blood. On the 24th, at 3.30 P.M., when I saw him, the half-hourly process was still going on, and he had up to that time passed twenty-three pints—i.e., three gallons all but a pint in twenty-six hours. He was quite comfortable, had no headache, no twitching, the itching was almost gone, and the pupils were not so contracted. Urine: sp. gr. 1012; acid; no sugar; distinct ring of albumen with HNO_3. At 4 P.M. on the 25th he had passed one gallon of urine since the previous afternoon; during the next twenty-four hours he passed three quarts. On the 30th, at 6 A.M., he passed a stone per urethram. It measured seven millimetres in length, its greatest circumference being three millimetres. It weighed just over one grain, and was composed of uric acid and phosphates.

Remarks are needless, as the case tells its own story. The right ureter was evidently plugged a year ago, and the kidney in consequence disorganised, so that he had only the left one to depend upon; but fortunately this one seems to have been quite equal to the occasion, and secreted such a volume of urine that the stone was bound to move on, and was finally swept into the bladder. Similar cases are on record, but I have not heard of one in which there was such copious diuresis. In that respect I think this case beats record. The patient is now (April 15th) in his usual health.

STRANGULATED INGUINAL HERNIA WITHOUT LOCAL PAIN.

BY JULIUS CÆSAR, L.R.C.P. & S. ED.

THE case narrated below will, I think, illustrate in a very forcible manner the lesson inculcated by Dr. Shaw's opportune communication in connexion with the above subject in THE LANCET of March 17th.

In July, 1885, I received a letter from a man living some miles from my house asking me to send some opening medicine, as his bowels had not acted for four days, and were causing him pain. He omitted any reference to his being ruptured. On visiting him he made the following statement in reply to my queries: He had a rupture of ten years' standing, which had hitherto given him no trouble. He did not attribute his present state to the fact of his rupture having been down and irreducible for the previous four days, though such a thing had not occurred before. His bowels had not acted for four days, and he had a dragging pain about the umbilicus. On examining him I found a left inguinal hernia about the size of a duck's egg. It was not affected in any way by coughing or forced expiration or inspiration. My efforts at reduction, which were patient and prolonged, were not successful, and were not attended by the least pain at the seat of constriction. Seeing that the case was not urgent, I ordered him belladonna and opium internally, and spirit and lead lotion externally. Next day I found that the dragging pain at the umbilicus still continued, and that hiccough had developed during the night. Looking upon this as the first step towards the vomiting stage, I determined to give chloroform (with which I had not been provided on the previous day), and, if unable to reduce the hernia under its influence, to operate at once. Taxis not proving successful, I performed herniotomy. The sac and its contents were quite healthy. The wound was treated with lint soaked in lead and spirit lotion, and simply laid on it. The man never had a bad symptom, and resumed work in three weeks. My sole help was a labourer fetched from an adjoining field.

ACUTE YELLOW ATROPHY OF THE LIVER.

BY J. CARNE-ROSS, M.D.

ACUTE yellow atrophy of the liver is so rarely met with in practice, and its incidence amongst children is relatively so infrequent, that the following instance of what was probably a case of that disease in a child of five years of age may perhaps not be without interest.

At 7 P.M. on Nov. 6th, 1887, I was asked to see a child who was said to be very ill. At my visit I found him lying in his mother's arms. He was restless, throwing himself about and muttering deliriously. He was at once undressed and put to bed. On examination the temperature was 97° and the pulse 80 per minute. On auscultation the breath sounds were found to be normal, the heart's rhythm regular, but the first sound very soft. There was nothing to note in the abdomen. The liver dulness in the right mammary line was found on percussion to be contracted to a space limited by the breadth of the sixth rib; above and below the bone the percussion note was resonant. The left side was examined, and it was evident that the case was not one of misplaced viscera. Tongue moist, not much coated with brownish fur; sordes on the lips. The pupils were dilated, but reacted sluggishly to light; they did not, however, contract fully; no shrinking from light. The bowels had acted twice by the use of magnesia; the motions were said to have been the colour of white clay. Urine had been passed, and was said by the mother to have been saffron-coloured. The child was also said to be yellow, but the colour could not be recognised by candle-light. The boy appeared to take no notice of his surroundings, yet after repeated requests put out his tongue, but it was necessary to shout before he could be induced to draw it back again. With difficulty he was roused sufficiently to tell his name. At my morning visit on Nov. 7th the child was said to have

spoken intelligibly to his father at 1 A.M.; at 3 A.M. he had become completely unconscious, and was in that condition at the time of my seeing him. I found him lying on his back in profound coma; pupils widely dilated; breathing noisy and rapid; and he was continually vomiting a thick coffee-ground coloured matter with an offensive smell. The dull note elicited at the previous visit over the region of the sixth rib had now disappeared, and, indeed, it required care to detect that the note on percussion in this situation was a trifle less resonant than that obtained above or below the rib. Spleen dulness was not increased. Such violent vomiting took place whilst the exploration of the abdomen was proceeding that all further examination was desisted from. The boy's face was a dusky yellow, and this colour was distinctly marked all over the body. The child died at 11.20 A.M. A post-mortem examination was refused. The urine contained no albumen; sp. gr. 1026. The sample of urine was unfortunately thrown away before any further examination could be made.

The following history was kindly supplied by the medical attendant who was in charge of the case. The patient, the son of a labouring man, was aged five years and nine months. He had always been a fine, well-nourished, healthy boy, and came of a healthy family. He had been apparently quite well up to Oct. 29th, when his mother, noticing that he was looking yellow, took him to the doctor. Beyond the fact of his yellow skin the boy seemed to be in good health and spirits, was not feverish, made no complaint of pain, and his appetite was very good. He, however, occasionally vomited (no note was taken of the vomited matter). He continued in this condition until the morning of Sunday, Nov. 6th, when noisy delirium suddenly set in, and he complained of headache and pain in the epigastrium. The noisy delirium had subsided, being replaced by low muttering, when I saw him at 7 P.M.

It has not been considered necessary to encumber this relation with any account of the line of treatment pursued, which was confined to the exhibition of aperients.

CASE OF POISONING BY THE INGESTION OF HIMROD'S POWDER.

By GEORGE THORPE, L.S.A. LOND.

THE following case, which has lately occurred in my practice, may be interesting and worth insertion in THE LANCET, as I have not heard or read of anything similar.

I was called to A. W——, aged twenty-seven, who suffers from chronic bronchitis and asthma, and had been recommended to use Himrod's inhalation for their relief, which I believe is mainly composed of stramonium, lobelia, and other antispasmodics. Without reading the directions he had mixed himself a teaspoonful of it with water and drunk it. About an hour afterwards I was fetched by a boy, who said "his brother was dying, and would I come at once." On arrival I learnt the above facts from his mother, and found the patient staggering about the room as though intoxicated, frequently muttering, in a state of wild delirium, incoherent in his speech, and totally unconscious of his surroundings. The pupils were widely dilated, cold beads of perspiration stood upon his forehead, and his pulse was very slow and feeble, about twenty-five beats a minute. Altogether his condition was an alarming one. I at once administered an emetic of warm mustard-and-water, and subsequently one of sulphate of zinc, both acting well and bringing up part of the poison. I then ordered cold affusions to the head, and gave him some brandy-and-water, as the pulse was still getting slower. After a time he rallied slightly, and I left, giving directions for him to drink copious draughts of lime-water. I saw him again in the evening, when he was certainly improved, but still delirious. However, on seeing him the next morning he did not seem very much the worse for what had happened.

Considering the critical condition of the patient when I first saw him, and his improvement so quickly after the lime-water, I think that the latter must have some destructive influence over stramonium, as Sir A. Garrod has before proved.

PARKES MUSEUM.—The Clothworkers' Company have just sent a donation of £25 to the Parkes Museum, to aid in maintaining and extending its work of practically teaching the laws of health.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

MIDDLESEX HOSPITAL.

THREE CASES OF HYSTERECTOMY; REMARKS.

(Under the care of Mr. HENRY MORRIS.)

WE publish this week the third case of the series in which hysterectomy was successfully performed by Mr. Morris for tumour of the uterus. We would refer our readers to the introductory remarks on page 922 of our last issue.

CASE 3. *Recurrent fibro-cystic tumours of uterus; hysterectomy; wound of bowel; convalescent from operation; death five days after the separation of the clamp and seven days after exposure to infection of scarlet fever.*—C. W——, aged thirty-five, was admitted into Helena ward on Oct. 15th, 1887, suffering from a large abdominal tumour, attended with frequent retching and difficulty of defecation and micturition. The patient stated that the catamenia appeared at twelve years of age, and that she was generally regular. She was married at sixteen, and had two children—the first when seventeen and the last when eighteen years of age. No miscarriages. She had been separated from her husband for seven years. Seven years and a half ago Mr. Morris removed from her a large fibro-cystic tumour of the uterus.

First operation in 1880.—The following is an extract from the notes of the case in 1880 taken by Mr. Harratt, a former house-surgeon of the hospital:—"Catamenial periods regular; discharge small; no metrorrhagia. Two years ago (1878) she noticed a swelling in the right iliac region. She had great pain in the lower part of the back, and her health began to fail. The swelling became larger at each catamenial period, and at the end of the flow decreased in size. This continued for fifteen months. Nine months ago the swelling increased, but failed to diminish with the catamenial flow. At the periods the pains resembled those of labour. For four months there had been a white gelatinous vaginal discharge. Bowels constipated, never acting without medicine. Micturition frequent and scanty. On admission, in 1880, the abdomen measured forty-four inches and a half. There was a large solid tumour occupying the lower part of the abdomen, spreading to the left beyond the middle line, but chiefly seated to the right of it. It did not extend as high as the umbilicus, where there was a slight hernia which had existed for months. The flanks were tympanitic. The tumour was dull and did not fluctuate. The superficial veins were well marked out, but not distended. The cervix uteri pressed backwards against the rectum. The uterus was not enlarged, was normally movable, and did not seem to be connected to the tumour. An operation was performed on April 19th, 1880, as follows: An incision was made from an inch above the symphysis pubis to two inches above the umbilicus, and the abdomen opened. A tumour was seen, free from adhesions in front, larger part solid, upper part cystic. The cystic portion was tapped, and between three and four pints of clear yellowish fluid were withdrawn. This part was firmly adherent to the omentum in front and above, and to the intestines behind. At one part the adhesions were so firm that a part of the cyst wall, equal in area to the outspread hand, was left behind to be dealt with after the removal of the solid part of the tumour. The lower and solid portion was so tightly wedged into the pelvis that it required very considerable traction to raise it out through the wound. The pedicle was short, broad, thick and non-vascular, and attached to the fundus uteri. The right Fallopian tube was adherent to the tumour. A double ligature was passed between the tube and the ovary on each side and secured; then these appendages were removed with the tumour. The pedicle of the tumour was ligatured in three parts by silk ligatures, cut close off and dropped back into the peritoneal cavity. Subsequently the fragment of cyst wall was removed, and with it a considerable piece of

closely adherent omentum. The tumour weighed eleven pounds and a half, exclusive of the fluid."

The patient progressed favourably, and was able to leave the hospital in five weeks, but during convalescence her temperature frequently rose to 102° and 103°. This was considered to be due to small abscesses, which formed in the track of the sutures in the abdominal parietes. For six years and a half afterwards she remained quite well, and followed a laborious out-of-doors life.

History of present illness.—For the last year the lower part of the abdomen has been swelling. Catamenia have continued regular. The swelling has varied with the catamenial flow, but has of late rapidly increased. During the last four months she has often been too ill to get about, and has kept her bed for a fortnight at a time, owing to sickness, feverishness, and constipation. Her feet and legs have swollen, and during the last three months she has had pain and difficulty in micturition.

On admission, in October, 1887, she was described as a stout, florid-complexioned woman with a weather-worn aspect, complaining of great swelling of her abdomen, pain in the hypogastric and sacral regions, frequency of micturition, and constipation. Her whole abdomen was greatly distended, the greatest circumference being forty-four inches. Besides the general distention, there were felt and seen three smaller irregular protrusions in the middle line, which projected in a hernia-like fashion at the scar of the former operation. This scar extended from just above the pubes to two inches above the umbilicus. There was a large hard tumour felt in the left iliac fossa extending down into the pelvis. It was apparently solid. In the middle line were felt several small tumours, varying in size from a walnut to an orange, some of them being hard as if solid, and others elastic and fluctuating. They appeared to be connected to the large solid growth rising out of the pelvis. There was dulness over the left flank and left iliac region, and extending three inches to the right of the middle line. The hepatic and splenic dulness were normal, as also was the urine. On vaginal examination, the left side of the pelvis was found filled by the growth, but the uterus was quite mobile.

Second operation.—On November 7th, 1887, at 9·30 A.M., the following operation was performed:—An abdominal incision six inches long was made between the umbilicus and symphysis pubis. About half a pint of clear fluid escaped from the peritoneal cavity. Several small pedunculated fibroids and cysts were found attached by long pedicles to the large tumour. Eight of these growths were removed after ligaturing their pedicles, and then a large lobulated mass filling the pelvis and abdomen was exposed. This large swelling was found to be a compound fibro-cystic growth; one large part on the left side was tapped, and several pints of clear yellow fluid were withdrawn. Another large cyst, extending from the summit of the solid part of the tumour upwards and backwards as high as the diaphragm, was tapped, and a large quantity of dark blood-stained fluid escaped. The contents of the two cysts measured 236 ounces. There then remained a large nodulated mass of solid growth, which was gradually raised up, and was found to be connected with the upper part of the left side of the fundus uteri by a flattened pedicle about one inch in width. It was closely adherent to the colon on the left side and to the ileum on the right. In separating these adhesions a rent was made in the small intestine about an inch and a half long, and at a point where the gut was bound down by old adhesions to the iliac fossa. The opening in the bowel was immediately closed by a clamp, and the process of separating the tumour continued. This was a very difficult task, but was eventually accomplished. It was now ascertained that a number of small fibroids were scattered in the walls of the uterus, and it was therefore decided to remove the uterus with the large tumour. A Lawson-Tait's clamp was employed, and the uterus was divided just above the cervix. The rent in the bowel was closed by twelve fine silk sutures introduced after the manner of Lembert's. There had been no escape of fæcal matter from the rent in the intestine. There was very little hæmorrhage during the operation. The weight of the solid growth was 5 lb. 6½ oz. The pedicle was retained outside the peritoneal cavity, and fixed at the lowest part of the wound. The stump of the pedicle was rubbed with persulphate of iron, and covered with iodoform wool. The abdominal wound was dressed with boracic lint, iodoform wool, and gauze dressing. The patient at the end of the operation, though it lasted two hours and a half, had an excellent pulse, and showed no sign whatever of collapse or exhaustion.

All went well till 4 P.M. on Nov. 9th—i.e., about fifty-five hours after the operation, when the patient had a rigor, and the temperature rose to 102°. This was attributed to the use of the catheter. There was no sickness, pain, or other bad symptom. On the evening of Nov. 10th, another rigor occurred, which lasted twelve minutes; the temperature was 104·8°, and the pulse 132. The rigor was followed by free sweating, and a fall of temperature to 101°. On the 11th a troublesome cough set in, attended with free muco-purulent expectoration. On the 12th the lower lip was covered with herpes; and bronchitis of the larger tubes of both lungs, accompanied with trying cough and free purulent expectoration, was established. In spite of this she seemed to be doing very well, and caused no real uneasiness. On the 14th the cough was much improved, the temperature had come down to the normal, the herpes had gone, and the patient seemed well and cheerful. The sutures were removed, and flatus was passed freely per rectum. After this date the case took quite a natural course till the 22nd, the sixteenth day. On the 17th, the tenth day, the bowels were well opened four times in response to enemata of oil and water. On the 18th and 20th also the bowels acted naturally. On the 21st the clamp came away and the patient seemed well in every respect. On the 19th a person who had been discharged only two days from the fever hospital spent several hours with the patient without Mr. Morris's knowledge or sanction; this happened again on the 20th and 21st. It was afterwards ascertained that this person had suffered from scarlet fever, that she had swollen feet, and was shedding scurf from her head (a thing quite new to her) at the time she was with the patient, and that a fortnight later her hands and feet desquamated a second time. Moreover, this person had, in the hearing of the patient, disclosed the fact of her having had scarlet fever so lately, and the patient after learning this became alarmed for her own safety. The further course of the case was as follows. On the 22nd, the third day after exposure to the scarlet fever convalescent, she complained of headache, and at 6 P.M. the temperature was 104°, pulse 140, and her conjunctivæ were injected. At 10 P.M. the temperature was 105°. On the 23rd the wound was dressed; it was looking well. The abdomen was quite soft and flaccid and free from pain or tenderness. The morning temperature was 100·4°, the evening temperature 103°; pulse 120. The patient was very thirsty, and she vomited slightly on several occasions. The urine contained phosphates and mucus. At night she was delirious. On the 24th the vomiting continued and her excretions were passed in bed. Her temperature at 2 A.M. was 103·4°; pulse 124. During the evening she commenced muttering and was again delirious. Her face was very flushed, and she slept badly—only two hours in the night, and in short snatches. The urine was alkaline, and now contained a considerable amount of albumen. Her bowels were relieved after the administration of oil and simple enemata. Her abdomen was quite natural and free from pain, tenderness, and distention. The little wound was looking well, and was quite sweet. She was ordered a tablespoonful of champagne every half-hour. On the 25th, at 2 A.M., she complained of pain in her chest. There was great dyspnœa of a nervous order. Respiration 44; pulse 136; temperature 104·4°. Rhonchi were heard over both lungs and some moist râles at their bases. Expectoration was easy and rather abundant. After removing the cold-water coil, which was applied when her temperature went up, there was free sweating. Muttering delirium continued. The wound looked well, and the abdomen remained quite natural. Dr. Cayley examined the patient and could find nothing in the lungs or abdomen to explain her condition. On Nov. 26th, at 5.30, the patient was much worse; the temperature 105·6°; pulse 200; respiration 60. At 1.15 P.M. she died. No post-mortem was permitted.

Remarks by Mr. MORRIS.—It would be unfair to the statistics of the operation to include this last case as one of unsuccessful hysterectomy. This woman had practically recovered from the operation, severe and complicated by bowel injury as it was. The state of the abdominal walls and of the small conical wound left after the separation of the clamp, the flaccid, painless, natural state of the abdomen, the easy action of the bowels, and the natural character of the stools, negative the idea that anything wrong was taking place in connexion with the parts involved

in the operation. I believe this patient had communicated to her by the scarlet fever convalescent a poison, which, instead of producing scarlet fever, developed an unusual and irregular form of septicæmia, and that this was accompanied by extreme mental alarm. The susceptibility of this patient to any such influence was probably greater than that of most women who had undergone such an operation on account of the small amount of diet to which she had been restricted for many days on account of the injury to the bowel.

SOUTH DEVON AND EAST CORNWALL HOSPITAL, PLYMOUTH.

A CASE OF SUCCESSFUL TRANSFUSION; REMARKS.

(Under the care of Mr. WHIPPLE.)

THE notes of the following case were taken by Mr. W. L. Woollcombe, house-surgeon.

E. C——, male, aged fifty-five, was admitted on Jan. 16th, 1888, having fainted from loss of blood, the result of two jagged wounds, one on either side of the neck, on the level of the most prominent part of the thyroid cartilage; that on the right side being about four inches long, and exposing the carotid sheath; that on the left being superficial in the greater part of its extent, but penetrating deeply in the centre.

After careful examination, no bleeding point could be found; the wounds were therefore sutured with catgut and drained. A strong beef-tea enema was administered with one ounce of brandy. At 2 A.M., six hours after admission, violent hæmorrhage took place from the wound on the left side. The wound having been reopened, a pair of Spencer Wells' pressure forceps were placed on the bleeding point—a nick in one of the deep thyroid veins. The patient was now in a state of profound collapse. Complexion ashy-grey; pupils dilated and fixed; conjunctivæ insensible; pulse not perceptible; breathing shallow and gasping, and jactitation present; in fact, the man was on the point of death. The necessary apparatus being at hand, ten ounces of saline solution (phosphate of soda, twenty grains to the ounce) were quickly injected into the right median cephalic vein. The patient's condition improved immediately, his pulse becoming again perceptible, though small and somewhat thready; his breathing also became deeper and more regular, and his complexion much improved. After tying the bleeding vein in two places and dividing between, the wound was resutured. From this time the man improved steadily, with the exception of slight suppuration in the wound, which was reopened. In less than three weeks he was able to appear before the magistrates, and, after one day's imprisonment, to resume his occupation as a gardener.

Remarks.—As cases of successful transfusion are not very common, this one seems worth recording, especially as it tends to show that a simple saline solution is quite as effectual as a mixture of such a solution with defibrinated blood, and of course has the advantage of always being ready to hand. The apparatus used here was simply a glass syringe, connected with a glass nozzle by a short rubber tube.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

Dupuytren's Fracture.—Histology of Cancer after Incubation.—Sarcoma of Bladder.—Sloughing of Bladder following Cystitis.—Necrosis of Kidney.—Peculiar Cranial Fracture.—Bronchial and Pleural Carcinoma.—Sclerosis of Spinal Cord.

THE last ordinary meeting of this Society for the present session was held on May 15th, Sir James Paget, F.R.S. President, in the chair.

The report of the Morbid Growths Committee on Dr. Griffith's case of tumour in the neck was read by Mr. SHATTOCK. The whole of the morbid growth was found to be contained within vascular channels. Microscopically, it proved to be a dendritic sarcoma, and possessed a proper vascular supply. In many parts it presented a cystic appearance, which was the result of colloid or mucoid changes. In several places the neoplasm could be demonstrated to be continuous with the vessel wall. The presence of a number of giant cells was noteworthy, and their appearance could be associated with what was known concerning normal vascular histogenesis; the growth did not possess any of the characters of the infective granulomata. The occurrence of intra-vascular growths had been observed before, both in the neck and in the kidney.

Mr. JONATHAN HUTCHINSON, Jun., showed an example of Dupuytren's Fracture, obtained from a man aged twenty-five, who had sustained the fall of a heavy weight on the outer side of his foot. Both malleoli had been broken, as well as the fibula, about three inches above the ankle, and in addition the lower fragment had been separated from the tibia, from which it had pulled off a piece of bone—the attachment of the inter-osseous ligament. The astragalus had gone up in the gap thus formed and the distance between the malleoli was much increased. Amputation became necessary owing to extensive injuries to the soft parts. Dupuytren's fracture, which may be regarded as an exaggerated Pott's fracture, is so rare that only a few specimens exist in our museums, the chief being Sir A. Cooper's in St. Thomas's, and Mr. Thomson's in Dublin. Dupuytren stated that it occurred in the proportion of 1 to 200 cases of fracture of the fibula. At the London Hospital it occurred once (possibly twice) to 140 cases of Pott's fracture and 210 cases of fracture of the fibula. Forcible eversion of the foot, which causes the outer border of the astragalus to act as a wedge, seems to be the usual cause, and generally the interosseous ligament tears off its attachment to the tibia. The upper fragment of the tibia is retained in position by the interosseous membrane, and the extent to which the astragalus rises depends on the exact point at which the fibula is broken.

Mr. BALLANCE read a note by himself and Mr. SHATTOCK on the Histology of Cancer and Normal Tissues after Sterile Incubation. Reference was made to their experiments, the results of which were brought before the Society a year ago. Two of the tubes which were then shown were again exhibited; they were still sterile. The present communication dealt with the histological changes observed in incubated normal and tumour tissues. The stains used were logwood and fuchsin. The cancers examined had been kept in a solid medium, and a temperature of 100° F. had been maintained from the time of their removal from the body to their deposition in the incubator. Sections of a scirrhus examined with a 1-25th oil immersion lens showed that the nuclei possessed a granular nuclear matrix, which was either slightly stained or colourless; there were large nucleoli. The nucleus itself showed a delicate but distinct outline; many of them were of spinous or mulberry shape, due to projection of the nuclear granules. In other cases these granules lay free in the cell protoplasm. They were of spheroidal, oval, or comma shape, and many were connected with the intra-nuclear framework. The connective-tissue corpuscles appeared of two sizes, according to whether they were viewed longitudinally or transversely; there was a circular deeply stained nucleus, and around the nucleus the cell protoplasm was discernible, and free granules were visible in it. Viewed longitudinally, the nuclei were elongated or oval, and around them many similar particles were seen. The granules in the fibrous tissue framework were thickly and uniformly distributed; they appeared to be derived from two sources—from the cancer cells and from the connective-tissue corpuscles. Normal tissues, similarly treated, did not show these granules; they slowly refused to stain, and resembled in section the changes seen in infarction. A process of cell disintegration took place normally in the testicle. Although unable at present to offer any proofs, the authors thought that the histological changes above described had a bearing on the question of the method of infectivity of cancer. The process had the appearance of being an active one, and thus differed from the histological changes seen in inflammatory conditions. Infection of the lymphatic glands might be effected through the medium of the nuclear particles; they might, perhaps, induce cell activity in the same way that the spermatozoa acted on the germ cell, and this process resembled that of "rejuvenescence" observed in protozoa. These particles, capable of infecting by contact, might be named "cancerozoa." Gussenbauer had studied exhaustively cancerous secondary deposits in lymphatic glands, and he concluded that secondary infection was brought about by small particles which incited the cells to multiply. His conclusions were supported by these recent observations.—

Dr. PERCY KIDD asked if the granules were stained by aniline colours alone, or by other reagents.—Mr. BALLANCE replied that both logwood and fuchsin stained them equally well.

Mr. VINCENT JACKSON showed a Sarcoma of the Bladder removed from a man aged seventy-six. In 1883 he observed blood on micturition; the hæmorrhage recurred again and again, until later only blood was expelled. An exploratory operation was advised, but the man refused and died towards the end of 1885. A growth was found which occupied the base of the bladder, covering the trigone and extending forwards across it. It was single, and broadly pedunculated, the attached parts being somewhat smaller circumferentially than the free. Microscopically it proved to be a small round-celled sarcoma, the cells of which were in direct contact with the bloodvessels. The cells varied much in size, and the bloodvessels were numerous and of irregular calibre; there were interstices in the tumour full of extravasated blood. In some parts the growth resembled alveolar sarcoma, and in others small round-celled sarcoma; in others, again, it closely resembled myxoma. Vesical growths were usually posterior and sessile, whereas here the base was affected, and the growth possessed a wide peduncle. Was an operation in an old person desirable? A complete after-history subsequently to removal was a desideratum.

Mr. BRUCE CLARKE brought forward a case of Sloughing of the Superior Fundus of the Bladder following Cystitis and Stricture. The patient, a man aged thirty-six, was admitted with retention of urine of three days' duration. Catheterism had been performed without success. The bladder dulness reached up beyond the umbilicus. A small catgut was passed up a railroad catheter, and was retained in the bladder, enabling three or four pints of urine to drain away. A good deal of blood passed with the urine, and, as the contents of the bladder seemed to be more than usually solid and firm, it was conjectured that there might be a considerable amount of blood clot within. Five days after admission the urethra admitted a No. 10 English catheter, but the man could not void his urine voluntarily, and it still contained blood. In a fortnight the urine was foul and ammoniacal, notwithstanding antiseptic injections. A month after admission, as his temperature was high and he was getting steadily worse, perineal cystotomy was performed. The interior of the bladder was roughened, ulcerated on the surface, and covered with phosphates. The patient at first improved, but, suppuration continuing, he sank and died at the end of the second month after admission. On opening the abdomen, the cæcum was found to be adherent to the upper surface of the bladder, and on lifting it up the whole of the upper extremity of the bladder came away with it in a gangrenous condition. There was a large slough of mucous membrane inside, and between the bladder and the rectum was a considerable amount of pus, which was shut off from the general peritoneal cavity by adhesions. The prostate was natural. The urethra had sloughed round the aperture of the wound. There was no stricture discoverable. All the viscera except the kidneys were healthy, and they were white and in a condition of tubal nephritis. Cases in which small sloughs occurred in the mucous membrane of the bladder, or which might even involve all its coats, were not very uncommon in connexion with diseases or injuries of some portion of the central nervous system. In pregnant women, too, sloughing might take place from pressure, or immediately, in consequence of an acute attack of retention of urine, but he had been unable to find any case which was an exact parallel to the above. The bladder apparently was paralysed by an acute attack of retention, and it never again regained its power of contractility; in spite of all the efforts which were made to keep it sweet and empty it at regular stated intervals, the process of inflammation eventually terminated in gangrene of a large portion of the viscus, and this caused the patient's death.—Sir JAMES PAGET asked if there were not a specimen of separated and gangrenous vesical mucous membrane in the museum of St. Bartholomew's Hospital.—Mr. BRUCE CLARKE replied that the specimen referred to involved the mucous membrane only, not all the coats of the bladder.

Dr. CHARLEWOOD TURNER showed a specimen of Necrosis of the Pyramids of the Left Kidney. The patient was an obese female, aged sixty, who died with gangrene of the right foot and leg. She had also glycosuria. The papillæ, with a great part of the pyramids of the kidney, were necrotic and partially detached from the living tissues, which appeared unchanged up to the line of separation. The organ appeared otherwise healthy. There was no pyelitis; the other kidney and bladder were normal. There were fatty infiltration of the heart and atheroma of the aorta, but no valvular lesion. Two specimens of similar lesions of the kidney previously exhibited to the Society (in 1885 and 1886) were referred to. The simultaneous necrosis of all the pyramids was attributed to thrombotic obstruction of the arterioles, due to defect of the general nutrition and to some disturbance of the local nutritive functions. The separation of the sequestrum, instead of its absorption, as in the case of cortical necroses, was attributed to the contact of the necrosed tissue with the urinary secretion.

Mr. TARGETT exhibited an Isolated Fracture of the Base of the Skull, taken from a boy of eighteen, who received a blow on the left mastoid region, which was followed by symptoms of meningitis, of which he died a week after the accident. He had suffered from left otorrhœa for many years. Post mortem a fissured fracture was found running across the left petrous bone, which was entirely isolated, and extended from the groove for the lateral sinus to a point just behind the foramen spinosum. The posterior wall of the tympanum was remarkably thin, and fenestrated from old ear disease. There was general suppurative meningitis, but no thrombosis of the sinuses. The chief points of interest in the specimen were the direction and limitation of the fracture, as they tended to support Von Wahl's theory of the production of fractures of the base of the skull (*Centrablt. f. Chirurg.*, December, 1887). Mr. Arthur Hare has recorded (THE LANCET, February, 1888) a somewhat similar case, and he pointed out that these isolated fractures of the base were of great importance, in that they might be regarded as the first steps in the building up of the more ordinary types of fracture, "where the complexity of the lesion was apt to mask the manner of its production." He was also of opinion that they were much more frequent than was generally supposed.

Dr. G. N. PITT showed a case of Primary Cylinder-celled Epithelioma of the Pleura. The growth had lined the parietes of the left chest as a uniform dense white cuirass one-fifteenth of an inch thick, and showed numerous small circular depressions such as were often seen with perihepatitis due to shrinkage. The lung was adherent firmly above as far as the fifth rib behind, and was splenised from compression by fluid, about twenty-six ounces of blood-stained serum being found in the pleura. The growth formed a cap over the apex of the lung a quarter of an inch thick, but did not extend behind to the root of the lung. The visceral pleura was, except at the top, quite healthy. There were two small superficial nodules on the right pleura, slightly invading the lung. The growth invaded the glands of the anterior mediastinum surrounding the aorta, and extended down along the lumbar glands to the groin. There were nodules of growth in the pericardium, and five minute submucous plaques of growth a twentieth and a sixth of an inch across in the duodenum. Microscopically the growth consisted of a fibrous stroma with many round and spindle-celled nuclei containing alveoli lined by cylindrical-cell epithelium. The clinical history of the case was that a woman aged sixty-one had had for a year persistent pain in the left side, with cough and shortness of breath. The left chest was dull, smaller than the right, and gave deficient breath and voice sounds, with œgophony at the base. She died from cerebral embolism due to detached vegetations from the mitral valve. Primary cancer of the pleura is extremely rare, but the uniform affection of the whole of the parietal pleura on one side appeared together with the history of one year's constant pain in the left side to point to this being the primary growth. The whole body was most carefully searched for primary growth, and the seats which had to be excluded were: 1. The minute plaques in the duodenum. It seemed impossible that they could be the origin, as there was extensive gland infiltration throughout the body, but not much in the aortic glands near them, and none in the mesenteric. The nodules were minute and multiple. 2. The mucous glands of the bronchi and the lung itself. The root of the lung was unaffected and the growth scarcely invaded the lung except superficially at the apex and beneath the two nodules in the right side. While, therefore, it was impossible to prove that the pleura was the primary seat of the growth, Dr. Pitt thought that the naked-eye appearances made it probable. As the result of

a search through the literature on the subject, scarcely anything appeared to be known as to the primary malignant diseases of the pleura. Dr. Pitt showed a small growth originating in a gland beneath the bifurcation of the trachea, which was removed from the body of a man who died from cerebral hæmorrhage. Microscopically it was a rounded-cell sarcoma. He also showed sections from a case of carcinoma originating in a bronchial gland, which compressed the right bronchus, but did not invade it, but which invaded the lung slightly. It was impossible to be certain that the growth did not originate in the lung, but it did not appear to do so, although it was difficult to understand how carcinoma could arise in glands; still, undoubted cases had been recorded. It was not desired to insist upon this growth having arisen from the gland rather than from the lung, so much as to draw attention to the not so very infrequent occurrence of cases in which the growth was confined to a small nodule at the root of the lung.—Mr. SHATTOCK said that Dr. Pitt would gain but few adherents to the view that columnar-celled carcinoma of the pleura was of primary origin there. In the first instance the bronchial and œsophageal mucous glands should be examined and excluded.—Mr. GODLEE said it was especially common for secondary tumours to be large after a small primary intestinal growth.—Dr. COLLIER referred to a case which was diagnosed as malignant disease of the œsophagus during life, in which post mortem the pleura was found much thickened, and it nipped the otherwise normal œsophagus. Dr. Kingston Fowler confirmed his opinion that it was a scirrhus, though no other starting point for it could be found.—Dr. PERCY KIDD had seen more than one case of carcinomia of the pleura in which no other primary source could be discovered.—Mr. R. W. PARKER thought in this case the lung growths might be primary.—Dr. PITT, in reply, said the intestinal growths nowhere exceeded one-sixth of an inch in size. He had examined the bronchial mucous glands without success.

Dr. G. N. PITT likewise read a report on the Spinal Cord from Dr. Collier's case of Charcot's joint disease. There was extreme sclerosis of the root zone of the postero-external columns, of Goll's columns, more extensive below than above, and a diffuse sclerosis of the rest of the posterior columns. On the right side the anterior horn in the dorsal region was rather smaller and the motor cells less numerous and well developed than on the left, and Clarke's column was markedly sclerosed on the same side; there was also a deep depression between the lateral and posterior columns. No changes were noted in the cells of the anterior horn of the lumbar enlargement of the left side corresponding to the hip joint affected.—Dr. ORMEROD asked if the ascending cerebellar tract on the same side was affected. Dr. PITT replied that there was no evidence of such affection.

The following card specimens were shown:—

Mr. COLMAN: Polypus of Umbilicus.

Mr. S. PAGET: (1) Unusual Fracture of the Head of the Humerus; (2) Adenoma of the Tongue.

Dr. COLLIER: Curious Fracture of the Larger Pastern Bone of a Horse.

Dr. ORMEROD: Cancer of the Gall Duct.

Mr. V. JACKSON: Stone from a Vesical Diverticulum.

Mr. FENWICK (for Dr. Harris): Bilharzial Carcinoma of Bladder.

Mr. STONHAM: (1) Tubercle of Prostate and Vesiculæ Seminales; (2) Cancer of Prostate, with Prostatectomy; (3) Melanotic Cancer of Bone; (4) two specimens of Cancer of Œsophagus necessitating Tracheotomy; (5) Hæmatocele of Tunica Vaginalis from difficult Breech Delivery; (6) Cyst of Peritoneum.

Mr. BATTLE: (1) Duct Cancer of Breast; (2) Very early Malignant Disease of Testis; (3) Sarcoma of Lower Jaw associated with Necrosis.

Dr. B. O'CONNOR: Hydatids of Liver and Spleen.

Mr. LUNN: (1) Tabetic Feet; (2) Calvaria, Clavicle, and Lower Jaw from a case of Osteitis Deformans; (3) Multiple Epiphysitis.

Dr. HEBB: (1) Cancer of Thyroid Isthmus; (2) Tuberculosis of Breast.

Dr. PENROSE: Aneurysm of the Heart.

Mr. S. G. SHATTOCK: (1) Two Mammiferous Dermoid Cysts of the Ovary; (2) Secondary Duct Cancer of the Breast, in Ribs.

Dr. G. N. PITT: Interlobular Emphysema of Lung, secondary to Aortic Aneurysm pressing on Trachea.

CLINICAL SOCIETY OF LONDON.

Suture of Ruptured Urinary Bladder.—Tonsillitis treated by Cocaine.—Bilateral Laryngeal Palsy from Acute Laryngitis.—Necrosis of Hyoid Bone.

AN ordinary meeting of this Society was held on the 11th inst., Dr. W. H. Broadbent, F.R.C.P., President, in the chair.

Mr. SYMONDS read a case of Rupture of the Urinary Bladder, in which the rent was sutured. The patient, a child aged seven, was thrown from Blackfriars-bridge, falling into a passing barge on to her abdomen. She was admitted into hospital in a state of extreme collapse, and for some time it was feared she would die. The abdomen was full and tender, chiefly over the hypogastric region, where was a prominence exactly resembling a moderately distended bladder. No urine having been passed after about six hours a No. 1 catheter was inserted. At first a few drops of clear urine were withdrawn, and then a drain of dark blood. Under chloroform a catheter was again introduced, and a small quantity of dark fluid removed. An attempt was made to pass the catheter through a possible rent in the viscus without success. The abdomen was at once opened, for though the catheter passed easily into the bladder, no reduction was effected in the dull prominence of the hypogastric region. A large quantity of dark fluid, having a faint urinous odour, immediately escaped. The rent was not at once found, but on passing a steel sound into the bladder it protruded just below the apex. There an irregular rent an inch and a quarter long was found, involving partly the peritoneal, but chiefly the extra-peritoneal, surface. It was Y-shaped. The fold of peritoneum passing from the bladder to the abdominal wall was much lacerated, and the edges of the bladder were much torn. About twenty Lembert's sutures were inserted, the peritoneum washed out with weak carbolic acid and perchloride of mercury, and the abdominal wound closed. A catheter was tied into the bladder. For a time the child did well. Then the catheter irritated her, and was removed. She never recovered from her collapse fully, passing from it into a restless, non-feverish condition. Fearing an accumulation of urine and inflammatory products, the abdomen was reopened on the sixth day, but nothing was found. Next day urine escaped through the wound, and the child died on the eighth day. At the inspection a collection of pus was found on the left side of the bladder, extending into the left ilio-lumbar region. The peritoneal part of the wound was soundly healed, but the non-peritoneal part was gaping widely, the sutures having torn through. The urine had escaped, and had set up the suppuration. There was no general peritonitis. There was separation of the right sacro-iliac synchondrosis. In reviewing the case, Mr. Symonds said that he considered the best plan would have been to have closed the peritoneal part of the rupture and the rent in the anterior false ligament, and to have left the rest of the wound open, with a drainage tube in the bladder. The edges of the rent were ragged and bruised, and, though turned in, the muscle did not unite, nor could it be expected to do so. The case, he pointed out, was a good illustration of the necessity of leaving the extra-peritoneal portion of the rent open. One point in the diagnosis was important: the prominence representing the bladder was due to the urine, the fluid not having passed upwards to any extent. Above it the small intestine formed a boundary, the pelvic cavity being quite empty of bowel.—Sir WM. MAC CORMAC thought it best to close both the intra-peritoneal and the extra-peritoneal rupture. Certainly a drainage tube should be used.—Mr. BENNETT said that a drainage tube had better be used in order to drain off inflammatory exudation and to protect the parts, supposing the extra-peritoneal wound gave way.—Mr. SYMONDS agreed that, as a rule, drainage should be resorted to.

Dr. DE HAVILLAND HALL read notes of three cases of Acute Parenchymatous Tonsillitis or Quinsy treated by Cocaine. Case 1: A labourer, aged twenty-eight, was admitted into the Westminster Hospital on Sept. 28th, 1887, suffering from quinsy. He had had two similar attacks in the last five years. On admission he had been ill four days. The right tonsil and adjacent soft parts were enormously swollen, and he was unable to swallow without the greatest difficulty and pain. On the 30th there was complete inability

to swallow, but after painting a 20 per cent. solution of cocaine freely over the whole of the fauces the patient was able to swallow some bread-and-milk. The same night the left tonsil became affected, and the cocaine solution was applied again next day with an equally good effect, and the day following he was able to swallow bread-and-butter. No suppuration occurred. The patient left the hospital quite well, after having been in one week, instead of four and three weeks respectively, as on the two former occasions. Case 2: A publican, aged twenty-five, seen in consultation with Mr. Wright at Kennington on Oct. 26th, 1887. When seen the patient's complexion was dusky; he was suffering from some dyspnœa and great dysphagia. Both tonsils and the soft palate were greatly swollen, and were covered with a viscid secretion, but there was no false membrane. Pulse 120, feeble. Urine: sp. gr. 1030; loaded with albumen. The patient's condition was a most anxious one. The throat was swabbed out with a 20 per cent. solution of cocaine, and the application was repeated in ten minutes. Five minutes later the patient was breathing easier, and was able to swallow half a pint of a mixture of egg, milk, and brandy. During the next two days applications of cocaine were made night and morning, and one on the third day. The patient gradually improved, no suppuration occurred, and a week later the urine was free from albumen and he was well. Case 3: A porter, aged thirty-nine, attended at the Throat Department of the Westminster Hospital on Nov. 16th, 1887, complaining of sore throat and inability to swallow for thirty-six hours. He was previously quite well. The left tonsil and adjacent parts were swollen, and there was a yellow patch on the tonsil. Pulse 88, fair volume. Temperature 102·2°. Urine contained a trace of albumen. A 20 per cent. solution of cocaine was applied, and the patient was soon able to swallow half a pint of bread-and-milk. Four days later the patient had no difficulty in swallowing, and was practically well. In all three cases, as soon as the patients could swallow easily, tincture of the perchloride of iron, with or without quinine, was ordered. Dr. de Havilland Hall pointed out that cocaine has a twofold action in these cases: it diminishes the sensibility of the parts to which it is applied, and at the same time lessens the blood supply; hence deglutition is much facilitated. He also thought that it checked suppuration. He advises the throat to be sprayed out with a solution of bicarbonate of sodium, ten grains to the ounce, before the cocaine is applied. By this means less cocaine is needed, and it appears that cocaine acts more efficaciously in the presence of an alkali.—Mr. STOKER said he rose to emphasise Dr. Hall's remarks. He suggested, however, that a good way to prevent recurrence of the inflammation would be to remove the tonsils. While cocaine certainly merited all the praise bestowed upon it in these cases, he mentioned that some care was necessary, as he had seen patients almost expiring from the effects of cocaine used for this purpose.—Dr. ALEX. MORISON suggested that the syncopal attacks to which allusion had been made might in some cases be due to mere manipulation of the inflamed tonsils. He quoted a case in which merely touching the inflamed tonsils had brought on an attack of syncope, which narrowly escaped proving fatal.—Dr. SEMON quoted several cases to show that cocaine was not a drug to be used indiscriminately.—Dr. HALL, in reply, mentioned that last week he had used a 20 per cent. solution of cocaine to a young and strong man, who was very strongly affected by it, and had to lie down for nearly an hour before the effects passed off. He always applied the solution now with a brush, all the cases in which untoward symptoms had showed themselves having occurred when he used the spray. He observed that peri-tonsillar inflammation seemed to take place in some cases when practically no tonsillar tissue was left. His remarks only applied to parenchymatous tonsillitis, and the same good results had not followed the use of cocaine in the follicular form.

Dr. PERCY KIDD read a case of Complete Bilateral Paralysis of the Vocal Cord from Acute Laryngitis, with recovery. The patient, a pale thin woman, aged thirty-seven, the subject of chronic bronchitis, complained of shortness of breath and loss of voice, which had developed a few days previously. On examination, there was inspiratory dyspnœa, with complete aphonia, and harsh laryngeal breathing was audible over the upper part of both lungs. The mucous membrane of the larynx was deeply congested, and there was much swelling of the aryepiglottic folds, ventricular band, and to a less extent of the inter-arytenoid fold. In the last situation there was a small yellowish mass, which could not be detached by coughing. The vocal cords occupied the cadaveric position, and remained motionless during inspiration and phonation. The patient was ordered cold applications to the throat, ice to suck, and complete rest. Four days later she was much better, the dyspnœa had diminished, there was less laryngeal swelling, and the inter-arytenoid fold presented a normal appearance. There was no trace of the small yellow mass—probably a piece of inspissated mucus. The vocal cords had to a great extent recovered their power. On phonation the normal closure of the glottis occurred, but abduction was still very deficient, though not absolutely lost. From that time she rapidly recovered, and in three weeks the larynx was perfectly healthy and the vocal cords had recovered their functions. The want of mobility of the cords was attributed to paralysis of their muscles from inflammatory infiltration of the intra-muscular nerve filament and muscular fibres. Reasons were given for the belief that mechanical fixation from abscess, perichondritis, swelling of the inter-arytenoid fold, &c., is inadequate to explain the succession of events.—Dr. SEMON said he had come to the meeting feeling somewhat sceptical as to the possibility of the existence of a bilateral rheumatic paralysis of the vocal cords. He agreed that there was no *a priori* reasons why cold should not affect the recurrent laryngeal nerve as it did the facial; though being better protected, the former was less liable to such influence. He said that the order of retrogression certainly supported the diagnosis of rheumatic paralysis, but it was the first case on record of bilateral paralysis from this cause.

Mr. NUNN read a paper on a case of Necrosis of the Greater Cornu of the Hyoid Bone and of Ossified Portions of the Thyroid Cartilage, with Extrusion of the Sequestra from an Abscess in the Anterior Triangle of the Neck following Gummatous Ulceration of the Tongue and Perichondritis of the Thyroid and Cricoid Cartilages, followed by profuse Hæmorrhages, Pneumonia, and Phthisis. The patient, aged thirty-three, was a gentleman who had served with the army in India for a short period. About three years before coming under Mr. Nunn's notice he had suffered from syphilis followed by constitutional symptoms. Tertiary ulceration of the tongue was the chief trouble. The irregular habits of the patient prevented the steady carrying out of any treatment. At the end of fourteen months swelling with tenderness appeared on the right side of the larynx, and a couple of weeks later profuse hæmorrhages, three in number, occurred; ultimately the sequestra above named were discharged from an abscess which formed in the anterior triangle of the neck near the sternum. The abscess ultimately became a pharyngeal fistula, liquid food escaping during the act of deglutition. Pneumonia set in immediately after the hæmorrhages, and finally the patient died from phthisis. After the first hæmorrhage Sir James Paget was consulted in respect of ligaturing the carotid artery, but the operation was decided against.—Dr. PERCY KIDD was not sure of the source of hæmorrhage; the lungs might explain it.—Dr. BROADBENT suggested that the phthisis might have been "ab hæmoptoë."—Mr. NUNN, in reply, agreed with this suggestion, and believed the blood came from the lingual or some artery near it.

Dr. URBAN PRITCHARD showed a living case of Cephalhydrocele.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.

Cancer of Vertebræ.—Rare Congenital Deformity of Hands.—Expulsion of Dermoid Cyst per Rectum during Labour.—Perforation of Eyeball by the Knot of a Whip.—Large Wen in Neck.

AN ordinary meeting was held on April 6th, Mr. C. R. B. Keetley, F.R.C.S., President, in the chair.

Mr. ROCHE LYNCH again produced his specimen of Cancer or Sarcoma of the Lumbar Vertebræ, which he described at the last meeting (THE LANCET, April 7th).—In the adjourned discussion, the PRESIDENT said that he had seen a case of secondary cancer of the Vertebræ, in which the symptoms had been attributed to hysteria.—Mr. LLOYD had seen a specimen of melanotic sarcoma of the spine. The peculiarity of Mr. Lynch's case was that it seemed to be a case of primary cancer of the vertebræ, and was probably unique as such.

Mr. PERCY POTTER showed a man in whom the metacarpal bones were fused in such a manner that each hand

had the appearance of being composed of two digits only and a thumb. There was no corresponding deformity in the feet, nor was there evidence of hereditary transmission, neither the parents nor children of the patient having the malformation.

Mr. PRIOR MALLAM related the following extraordinary case, and exhibited the specimen. A woman, who had had two natural confinements previously, was taken in labour, and found to have in the recto-vaginal septum a tumour large enough to obstruct the descent of the child's head. Forceps were applied, and, in bringing the child forcibly into the world, the tumour was pressed into the rectum and out through the anus. On opening the tumour, it was found to contain serous fluid and some hair. On one side was a pedicle, which had evidently formed an intra-pelvic attachment. The patient recovered without a bad symptom.

Mr. PERCY DUNN related the case of an attendant at a hippodrome who felt his eye suddenly cut with, as he supposed, a pebble, kicked up by one of the ponies which were being trained. The man was admitted to the West London Hospital, and the day after, there being severe panophthalmitis, Mr. Dunn performed enucleation, with the best possible result, the man being made an out-patient at the end of eight days. A curious thing was that the man, when struck, was standing beyond the reach of the whip, and Mr. Dunn supposes that the thong had become weakened by heat, and the knot detached and projected with great speed. The knot, which was half an inch long, was found to have pierced the globe just below the horizontal meridian of the corneo-sclerotic junction, and to have become embedded in the vitreous. Mr. Dunn expressed his belief that in a case of panophthalmitis it was better to enucleate at once, and trust to antiseptic precautions to prevent inflammation extending within the skull.—Mr. LUNN related the case of an old woman in whom the rent was produced by a pin stuck in some bedclothes she was shaking.—Mr. LANG thought that, although panophthalmitis might be safely treated by immediate enucleation, yet the better plan was to wait until suppuration had subsided. In the meantime pain might be relieved by removing the anterior part of the globe and scooping out the contents.

Dr. ALDERSON showed a hard, dark concretion which had sloughed out of the tonsil of a patient seventy-two years of age. There was no history of gout or of a calculous diathesis.—Dr. BALL had seen many calcareous concretions from tonsils, but not one so dense and brown as this.

In the case of a wen of old standing, and which extended from the jaw to the clavicle, Mr. KEETLEY (President) had operated in the following manner. Removing an elliptical piece, measuring three inches by an inch and a half, from the cyst-wall, he turned out the contents and then cleansed the cavity with antiseptic solutions. He then stitched the hole in the cyst to the hole in the skin, and plugged the cavity of the cyst with strips of iodoform gauze, which were renewed from time to time. At the end of a month the cyst had almost disappeared. During treatment the head and neck had been kept fixed by a poroplastic apparatus, which had probably had much to do with the successful result.

The following pathological specimens were exhibited:—Mr. Percy Dunn: (1) Cyst of Ovary; (2) Nævoid Condition of Brain; (3) Sarcoma of Uterus; (4) Liver from a case of Peritonitis following Perforation in Typhoid. Mr. John R. Lunn: Cancer of Œsophagus.

OBSTETRICAL SOCIETY OF LONDON.

A MEETING of the above Society was held on Wednesday, May 2nd, Dr. John Williams, President, in the chair.

The following specimens were exhibited:—

Mr. DORAN: Glandular Structure in the Substance of a Primary Cancer of the Fallopian Tube.

Dr. GALABIN: Microscopic Section of Tube from a case of Tubal Gestation at fourth or fifth week.

Dr. GRIFFITH: 1. Microscopic Section of Oviduct of Frog, showing tubular glands. 2. Microscopic Section from a case of Interstitial Gestation, showing mucous follicles in the muscular wall of the Fallopian tube.

Dr. HORROCKS: Completely Inverted Uterus, removed by operation.

Dr. GRAILY HEWITT: Invalids' Compendium.

Dr. GODSON: Auvard's Nipple Shield.

Dr. ARMSTRONG (Liverpool): Alpha Enema Syringe.

Cyst connected with Uterus and simulating Enlargement of that Organ.—Dr. CULLINGWORTH described the case of a woman aged twenty-three, admitted into hospital on Nov. 23rd, 1886, with an abdominal swelling, which had been observed for five months. The catamenia were regular, but during her last pregnancy they had continued to the seventh month. The swelling fluctuated distinctly, and reached upwards as high as half-way between the umbilicus and the ensiform cartilage. A soft bruit synchronous with the radial pulse could be heard, especially towards the left iliac region. The uterus lay high in the pelvis, and was intimately connected with the tumour. No fœtal heart sounds could be heard. She left hospital, but returned on Dec. 20th, sudden abdominal pain having followed an attack of profuse metrorrhagia; and the abdomen, which had been very tense, became soft as the pain set in. She was pale and collapsed when readmitted. High temperature followed. By Dec. 26th she had greatly improved; a distinct, firm, elongated movable tumour could be felt in the lower part of the abdomen. Ascitic distension of the abdomen took place. On Jan. 19th, 1887, Dr. Cullingworth performed abdominal section. Six pints of ascitic fluid were withdrawn, and there were evidences of recent peritonitis. The uterus, or what appeared to be the uterus, was enlarged as at the fifth month of pregnancy. Douglas's pouch was obliterated by adhesions. The right ovary (as large as a hen's egg) and the tube were found to be covered with recent lymph; they were ligatured and removed. The left ovary was normal. The omentum was enormously thickened. Nothing like a ruptured cyst was detected. The patient died, with symptoms of catarrhal pneumonia, eleven days after the operation. At the necropsy the uterus was found to be of normal size, and what had appeared to be the enlarged uterus proved to be a thick-walled cyst, containing a quantity of thick, opalescent, jelly-like fluid, in which were some portions of tissue, like softened parchment. The left Fallopian tube ran along for some distance in the wall of the cyst, but did not anywhere communicate with it. No fœtal remains could be found. A thickened patch of tissue on the cyst wall was carefully examined, but Dr. T. Harris (Manchester), who examined it when fresh, could find no evidence that it represented degenerated placental tissue. The specimen had been referred to a committee after its exhibition before the Society in April. Their report was now read. The parts were minutely described, and it was concluded that it was impossible to say whether the tumour was a cyst which had grown, possibly from the left broad ligament, and extended to the right between the uterus and rectum, thus becoming adherent to the surrounding parts; or whether, on the other hand, it was the product of an inflammatory process with pseudo-cystic walls. The cyst had completely separated the posterior part of the uterus from its peritoneal coat. Douglas's pouch lay behind the cyst, obliterated by adhesions.—Mr. BLAND SUTTON believed that the cyst really represented hydatid disease.—Dr. HORROCKS thought that the thickness of the middle muscular coat negatived that supposition.—Mr. SUTTON considered that the presence of a layer of muscle fibre supported his view.—Dr. CULLINGWORTH regretted that the fluid from the cyst had not been examined; he was inclined to agree with Mr. Sutton's theory.—Mr. ALBAN DORAN admitted that the cyst occupied the position noted by Freund and others in their recorded cases of hydatid disease of the pelvis. But hydatids were usually much disseminated, and none were discovered at the necropsy on Dr. Cullingworth's case.—Dr. HEWITT had seen a case where a hydatid tumour was found in the same situation as in Dr. Cullingworth's specimen.

The Glands of the Fallopian Tubes and their Function.—Mr. BLAND SUTTON endeavoured to show that the mucous membrane of the tubes in the human subject was, contrary to the current opinion, glandular, and that the tubes themselves had a function beyond acting as simple passages for ova. Their structure had been so thoroughly investigated by competent histologists that the question was merely a matter of interpretation. The homology of the various parts of the human uterus and the avian oviduct was described and the function of those parts considered. Thus the infundibulum and the albumen segment of the oviduct corresponded with the Fallopian tube and its fimbriæ. The shell-forming segment and the uterus proper were homologous. The vagina was the homologue of the isthmus and the oviducal portion of the cloaca. The nature of a gland was considered and comparison made between the epithelial

diverticula of the oviduct, the uterus and Fallopian tubes, in order to show that the so-called rugæ of these tubes were really glandular diverticula, whose function was to secrete an albuminous material comparable to the albumen of an egg. From this substance the embryo obtained pabulum by means of the chorionic villi.—Mr. ALBAN DORAN stated that Hennig had shown, about fourteen years ago, that there were glands in the Fallopian tube, but had not convinced authorities in respect of his theory. Mr. Sutton had more thoroughly demonstrated the glandular nature of the tubal mucous membrane, but sceptical scientists might demand more practical evidence, in the shape of microscopic preparations and accurate diagrams, than could be afforded by his undoubtedly able arguments alone.—Dr. GRIFFITH insisted that in discussing the function of the highly specialised mucous membrane of the human oviduct, the glands found in the oviducts of many lower vertebrates should have been taken into consideration by Mr. Sutton.—In reply, Mr. SUTTON admitted the value of studying the oviduct in the lower vertebrates, but when it came to be a question of structural peculiarity in a mammal the oviducts in lower forms afforded little that was trustworthy. Doubtless the opinion that the rugæ of the tube were glandular in function had occurred to many, but they lacked the boldness, or perhaps rashness, to express it.

Hemiplegia occurring nine days after Parturition; Death; Partial Post-mortem Examination.—This case was recorded by Dr. E. F. SCOUGAL (Huddersfield). A patient, aged thirty-seven, was confined on Aug. 21st, 1887, of her seventh child. All went well till Aug. 28th, when she complained of numbness and tingling in the first, second, and third fingers of the left hand. At 1.30 A.M. on the 29th the nurse noticed that, amongst other symptoms, the patient's mouth was slightly drawn to the right. At 3.30 P.M. she was found as follows: Complete paralysis of the left arm and paresis of the left leg; slight divergent strabismus of the right eye, and the mouth slightly drawn to the right side. There had been a little difficulty in swallowing, which had now passed away. Consciousness and speech were unaffected; there was some pain on the right side of the head. The skin was moist; temperature normal; pulse 96. No loss of sensation could be detected. A three and a half grain calomel pill was given, to be followed by two ounces of Æsculap water every two hours until catharsis was produced, and a draught containing iodide of potassium and citrate of potash was prescribed. By 1 P.M. the left leg was completely paralysed. In the course of the next day drowsiness came on; the bowels were opened by enemata. Later on, restlessness and increased pain in the right side of the head were observed. The temperature rose to 99·2°; pulse was irregular in rhythm and power, varying from 72 to 84. The secretion of milk had quite disappeared by Aug. 31st. The patient became comatose, and died at 2.15 on Sept. 1st. The brain alone was examined after death. A clot was found in a vein on the surface of the brain corresponding in position to the right middle meningeal artery, and another in a vein corresponding in position to the right middle cerebral artery. These clots were distinctly ante mortem. There was no sign of thrombi in the sinuses. The brain, pons, and medulla exhibited no trace of extravasations or of any other morbid appearance.—After some observations by Dr. MONTAGU HANDFIELD-JONES on a case in his own experience, Dr. LEITH NAPIER observed that puerperal hemiplegia was practically due to thrombosis, embolism, or reflex influences, the first cause being the most frequent.

A Case of Extirpation of the Uterus for Primary Carcinoma of the Body.—This communication was read by Dr. LEWERS. The patient was fifty-eight years of age, and had had one child. She had been subject to uterine hæmorrhage for ten months, accompanied ultimately with watery discharge, severe pain radiating to the thighs, and emaciation. On examination, Feb. 26th, 1886, the vaginal portion of the cervix was found normal, a hard lump was felt posteriorly, apparently in the supra-vaginal part of the cervix. The uterus, examined under chloroform, was freely movable, the body evidently enlarged. Through the speculum some blood-stained discharge was seen issuing from the os. The sound was then passed, and afterwards small fragments of a soft material appeared—i.e., the discharge. On March 1st, 1886, vaginal extirpation of the uterus was performed. The perineum was incised to gain room. The bladder was separated from the uterus, the utero-vesical reflexion of peritoneum being at this stage left uncut. Douglas's pouch was then opened to a small extent with scissors and the aperture enlarged by laceration effected with the fingers. The utero-vesical fold was then torn through from below, as the size of the uterus prevented the operator from passing his fingers along the back of the uterus and over the fundus so as to give a guide to the cutting through of that fold. The ends of the anterior and posterior incisions were united laterally by cutting at first through the mucous membrane only. The lateral attachments of the cervix were tied on each side by silk ligatures, passed with the aid of an aneurysm needle from behind forwards. The cervix was cleared as high as the level of the internal os. Each broad ligament was transfixed and tied in two halves, stout silk ligatures being employed. The broad ligaments were then cut through, and the uterus separated; on account of its bulk it could not be retroverted and brought out fundus foremost. The peritoneal wound was closed with silver sutures, the ends of the broad ligaments being adapted between the edges of the wound. A small drainage-tube was introduced into Douglas's pouch; it was found loose in the vagina two days later. The vagina was filled with eucalyptus gauze sprinkled with iodoform. The patient made a good recovery. The uterus was found to contain a papillary growth occupying the right side of its cavity, and separated from the healthy mucous membrane by a sharp line of demarcation. She continued in good health for several months; at length a lump could be felt in the upper part of the vagina, followed by secondary deposits in the lumbar glands. She died in the hospital sixteen months and one week after the operation. Dr. Lewers considered that the patient had enjoyed ten months of renewed health and comfort owing to the operation, which had prolonged her life.—The PRESIDENT was glad that Dr. Lewers had not published his case until able to give a complete account of it. Total extirpation of the uterus for cancer of the cervix was not justified, because supra-vaginal amputation was less dangerous and furnished as good results; recurrence, when it took place, appeared in the cellular tissue around the cervix, and not in the uterine stump. The scanty data at our disposal did not put us in a position to judge the value of total extirpation for cancer of the body. The mortality was high, and recurrence in most instances so early that it remained doubtful if in the majority of cases life were prolonged. Still, it could not be doubted that a longer or shorter respite from suffering was given in all cases which recovered from the operation.

MEDICAL OFFICERS OF SCHOOLS' ASSOCIATION.

THE annual general meeting of this Association was held at the rooms of the Medical Society, Chandos-street, on April 26th, the President, W. S. Savory, F.R.S., in the chair.

The minutes of the previous meeting having been read and confirmed, the following gentlemen were elected as new members:—Wilson Coltart, L.R.C.P., M.R.C.S., medical officer to Epsom College; Peter W. Delamotte, M.R.C.P.E., M.R.C.S., medical officer to the West London Schools, Ashford; and Percival Kingsford, M.R.C.S., L.S.A., medical officer to the Welsh High School for Girls and Feltham Reformatory.

The audited accounts for the year, showing a balance in hand of £39 2*s.* 11*d.*, were presented and passed.

The officers for the ensuing year were then elected as follows:—President: Mr. W. S. Savory, F.R.S. Vice-presidents: Sir Andrew Clark, Bart., Dr. Farquharson, M.P., Dr. Fuller, Dr. Brett, and Mr. H. Statham. Treasurer: Mr. Noble Smith. Hon. Secretaries: Dr. Alder Smith and Dr. Charles Shelly. In the place of four members retiring by rotation, the following were elected as new members of the Council: Dr. Abercrombie, assistant physician to the Children's Hospital, Great Ormond-street; Mr. Chune Fletcher, medical officer to Merchant Taylor's Schools; Mr. Wm. Holderness, medical attendant at Eton; and Surgeon-Major Lever, medical officer, Military College, Oxford. Messrs. Statham and Chune Fletcher were re-elected auditors.

The Hon. Secretaries then presented the Code on the Construction and Maintenance of School Infirmaries and Sanatoria, on the preparation of which the Council had been continuously engaged during the previous eighteen months. It was discussed by the meeting, clause by clause, and certain modifications having been made in the text, it

was resolved that the Code should be printed and published for the Association, and that a copy should be sent to each member and to the headquarters of the large schools.

A vote of thanks to the Council, with a special vote of thanks to Dr. Shelly for his great help in wording and preparing the Code, was then passed unanimously, and the meeting separated.

Several members and guests subsequently attended the annual dinner, with the President in the chair.

CAMBRIDGE MEDICAL SOCIETY.

Malformation of Pulmonary Valves.—Charcot's Disease.—Epistaxis.—Intussusception.

AT a meeting on March 2nd, Mr. Stear, M.R.C.S., President, in the chair,

Dr. WM. COLLIER (Oxford) showed the heart and large vessels of a female patient, aged thirty-three, with the following history: The patient had enjoyed good health until eighteen years of age, when she had an attack of rheumatic fever, followed by constant pain over the upper half of the left side of the chest and dyspnœa; in consequence she became an in-patient of St. George's Hospital, under Dr. Dickinson, by whom she was transferred to Mr. Timothy Holmes, as suffering from an aneurysm of the arch of the aorta, the symptoms being a loud, harsh, systolic bruit, a marked thrill under the left clavicle in the second intercostal space, a pulsating swelling extending upwards towards the external notch, and an almost imperceptible left radial pulse. The patient was for six months kept on her back, and for a long period was confined to Tufnell's diet, and other forms of treatment were tried. On getting up again, however, the symptoms returned with increased severity, and, as the tumour was apparently rapidly increasing in size, Mr. Holmes, on Oct. 21st, 1875, exactly twelve months after admission, tied the left common carotid, the operation being followed by marked relief to the symptoms. Thirteen years later the patient died of phthisis in Oxford, when a post-mortem examination showed that all the symptoms were due to a congenital malformation of the pulmonary valves, and that an aortic aneurysm had never existed. The pulmonary valve was composed of two cusps firmly and smoothly united, forming a funnel-shaped opening about the size of a crowquill. The foramen ovale was patent. The root of the pulmonary artery was considerably dilated. Stenosis of the pulmonary artery gave rise to the bruit and thrill. It was considered probable that the aortic pulsation was transferred to the dilated pulmonary artery, and so simulated a pulsating tumour. Previously to the operation the very marked weakening of the radial pulse was thought to be due to the presence of a clot in the vessel. The case is fully reported in vol. ix., p. 114, of the Clinical Society's Transactions.

Dr. W. COLLIER also showed a case of Charcot's Disease of the Knee Joint. The knee joint exhibited was that of a woman aged forty-one, who first came under observation two years and a half previously with marked locomotor ataxy, with a strong history of syphilis, but none of either gout or rheumatism. Twelve months before her death (January, 1887) the left limb was noticed to be swollen, but no change could be found in the joint, with the exception of fluid effusion. For the sixteen months previous to this she had been practically bedridden, as the ataxy had been so severe as to prevent her standing without support on either side. Six months later (August, 1887) she was admitted into the Littlemore Asylum for General Paralysis, when it was found that in the short space of six months the joint had become totally disorganised; the bones were freely movable in every direction; there was very marked grating, but no pain. The patient died in December, when it was found that enormous loss of tissue had occurred, the crucial ligaments had entirely disappeared, the external condyle had gone, and yet, as had been observed in other similar cases, a large amount of new bone had been formed in the immediate neighbourhood of the destruction.

Dr. BRADBURY related the case of H. J——, aged thirty-nine, widower, admitted into Addenbrooke's Hospital on Nov. 26th. There was a history of cancer in two sisters, and the father died of tumour. The patient had had several attacks of severe epistaxis since boyhood. When nineteen years old he had some disease in the left lung, and lately has had several attacks of hæmoptysis. The present illness began with cough and pain in the right side of the chest and shoulder, blood-stained expectoration, and night sweats. On examining the chest, there was a smooth elevation as large as the palm of the hand extending from the clavicle down to the third rib, just to the right of the sternum. There was no pulsation felt and no enlargement of the superficial veins. Percussion was impaired over this region and caused some pain. Respiration was here feeble, with occasional rhonchus. No murmur was audible over the swelling, and the heart sounds were normal. There were no signs of aneurysm, and the lymphatic glands were not enlarged. The swelling increased in size and became more prominent, causing pain and slight fulness of the right arm. On several occasions he had epistaxis. The patient was given five-grain doses of iodide of potassium for a few days, and on Dec. 11th he was ordered fifteen minims of ethereal solution of Chian turpentine three times a day. The swelling continued up to Dec. 25th, and then gradually diminished, so that on Dec. 31st there was no prominence and only some hardness, the physical signs also clearing up. He still had attacks of epistaxis. He was discharged well, having gained 22 lb. in weight.

Dr. EASBY said on Feb. 17th he was asked to see H. W. F——, aged seven months, a male. On his arrival he found he was suffering from well-marked symptoms of intussusception, the first appearance of which had been noticed on the 14th. On a rectal examination being made, a sausage-like tumour was found high up, four inches in length. The child was placed well under the influence of chloroform, and with a seamless Higginson's enema syringe he commenced to inflate. Some trouble was experienced in keeping the sphincter tight round the nozzle of the syringe; this was owing to the dilated state of the anus from the tenesmus. In about two minutes there was a rush of air past the nozzle, the distention of the abdomen subsided, and on passing the finger, the sausage-like tumour had gone. Minim doses of tincture of opium were ordered, and for food lime-water and milk. On the 18th a good motion was passed, and on the 24th the child was well.

Reviews and Notices of Books.

A Manual of Diseases of the Nervous System. By W. R. GOWERS, M.D., F.R.S. Vol. II. London: J. & A. Churchill, 1888.

[SECOND NOTICE.]

IN the section of the work entitled Organic Diseases of the Brain, naturally changes such as anæmia and hyperæmia first receive attention. The symptoms of anæmia are dependent mainly on defective quantity and quality of the blood, but some influence has been ascribed to the diminution of the blood pressure to which the nerve elements are ordinarily exposed—as the author puts it, a mechanical influence of which the possibility cannot be denied and the probability cannot be proved. "Of all regions of cerebral pathology, that of congestion of the brain is perhaps the most obscure." Mosso has stated that the pulsation of the brain observed in persons who have lost a piece of cranial bone is increased by both intellectual work and emotion; perhaps the mechanism in this case is a mixed one, active congestion being associated with alterations of blood pressure and dilatation of the arterioles. Thirty-six pages are devoted to Cerebral Hæmorrhage, and of this about six treat of infantile meningeal hæmorrhage or cerebral birth palsy; the account of the symptoms of this protean affection is based on thirty-six cases that have come under Dr. Gowers' notice. Writing of thrombosis in the cerebral sinuses and veins, the question is asked, "Does primary thrombosis ever occur in the veins and not in a sinus? There is some pathological evidence that it does. Young children are sometimes seized with hemiplegia, commencing with unilateral convulsions that are prone to recur afterwards. Sometimes the attack comes on without exciting cause, sometimes under the same conditions as sinus-thrombosis. The symptoms point to a

cortical lesion, and it is not improbable that this is sometimes thrombosis in one of the veins of the convexity." Later on we read: "Two kinds of lesion have been assumed, in current theory, as the cause of these acute symptoms: according to the one, the primary lesion is in most cases vascular occlusion; according to the other, which has been put forward by Strümpell, it is inflammation of the grey matter of the cortex, 'polioencephalitis,' analogous to the inflammation of the grey matter of the spinal cord, 'poliomyelitis.' Attractive as the latter theory is at first sight, it rests upon no evidence, and the scanty pathological facts we possess are opposed to its validity, as are also the facts of etiology. A primary inflammation of any part of the cortex of the brain is a purely theoretical disease; if it occurs not rarely in childhood (as must be assumed on this theory) pathological evidence of it would certainly have been forthcoming, more abundant than that of the analogous spinal malady, as every kind of organic brain disease is more often fatal than is disease of the cord." We have quoted these passages *in extenso* because of their importance; but it seems to us to be open to doubt whether the arguments, carefully examined, do altogether overthrow the validity of the hypothesis. The disease often begins rapidly, very much in the same way as cases of poliomyelitis; the temperature rapidly rises even when the convulsive movements are not frequently repeated. As to pathological evidence of inflammation, what would it be supposing that recovery took place as far as possible? Are the ultimate anatomical results of inflammation so widely different from the ultimate changes due to hæmorrhage or thrombosis? The disease sometimes commences in infants who are apparently in perfect health, and for no better reason than a poliomyelitis sometimes occurs. We admit the author's arguments are strong, but think his views somewhat too exclusive. The settlement of the question doubtless lies in the future; but perhaps inflammation may account for a certain number of the cases, embolism for another set, and thrombosis with hæmorrhage for a third group.

In discussing abscess of the brain, the occurrence of the secondary suppuration in this organ, and not elsewhere, is noted: "The cases are more numerous than those in which there is general pyæmia, and about 10 per cent. of all cases of cerebral abscess are of this origin. In the majority of these the suppuration is in connexion with the lung. Pneumonia, imperfectly resolved, and breaking down; suppurating cavities in the lungs, left by such pneumonia, or the result of bronchial dilatation; simple fetid bronchitis, and especially empyema, are the chief causal conditions. It never results from true tubercular cavities. Suppuration in the abdominal cavity is a less common cause, and still rarer is suppuration connected with the limbs." This is a concise statement of what is yet known of this curious phenomenon of associated suppurations. Strange as it may seem, in cases recorded by Ribbert and Zenker, thrush in the mouth was believed to be a cause of abscess of the brain. An abundant growth of oidium albicans occupied the mouth and throat, and the brain was studded with small abscesses containing the same fungus. The oidium in the pharynx has been traced into the epithelial layer of the mucous membrane by Wagner, and into the interior of the vessels.

In discussing the diagnosis of cerebral abscess, the most important element is very truly given as the combination of certain cerebral symptoms—equivocal in themselves—with a cause which is known to be capable of giving rise to cerebral abscess. This section of the book closes with an able account of intra-cranial aneurysms.

Chronic progressive softening of the brain as a primary process the author believes to be "justified by rare cases in which softening occurs without demonstrable association with vascular disease, and is so gradual in its onset, and slowly progressive in its course, as to make such an association very improbable." In the diagnosis of insular sclerosis, reference is made to cases described by Westphal, Leyden, and Langer, in which symptoms closely resembling those of insular sclerosis have existed during life without any post-mortem lesion to which they can be ascribed. "There is much doubt as to the nature of these cases. It is possible that most of them have been cases of general paralysis of the insane, the symptoms of which vary widely. In some cases of 'pseudo-sclerosis' there have been syllabic utterance and nystagmus, symptoms commonly absent in general paralysis. But these symptoms are met with in some forms of central degeneration other than insular sclerosis, and too much diagnostic weight must not be laid upon them." The chapter on Associated Palsy of the Bulbar Nerves contains descriptions of chronic, apoplectiform, and the acute inflammatory varieties.

More than four hundred pages are devoted to the consideration of general and functional diseases of the nervous system. We can only refer to a few subjects dealt with in this part of the book. "As a rule, when a child between seven and twelve years of age is said to have gradually lost the use of one arm, the disease is chorea." Electrical Chorea, Myoclonus Multiplex, Saltatoric Spasm, and Habit Spasm follow as appendices to the article on Chorea. Myographic tracings of various forms of tremor, taken directly from the moving part, afford a useful illustration. "The slowness of the muscular action in paralysis agitans is usually conspicuous in all movements, but it rarely affects the muscles of the eyes. Debove noted a retardation in the movement of the eyes which, if the patient was reading, occasioned a characteristic pause at the end of each line." Senile, simple, hysterical, asthenic, and toxic tremors are described. The pathology of tetanus is well discussed, the tendency being to regard the disease as almost purely neurotic, and not due to a toxic cause; it is allowed that the nerve irritation, "if it exists, must be peculiar in its kind and in its influence." Tetany, writer's cramp, and other occupation-neuroses are well treated. On epilepsy the author is naturally at his best. Migraine, exophthalmic goitre, diphtheritic palsy, hydrophobia, metallic poisoning, alcoholism, and hysteria are other important chapters. The last-named disease is alluded to as probably the most perfect type of a functional malady. "It not only consists in, but arises by, a functional disturbance, a loss of the due balance between certain of the higher functions of the brain. But many, probably most, of the definite groups of symptoms depend on the secondary derangement of the lower centres." Accounts are given of narcolepsy, African lethargy, and induced hypnotism.

In closing this notice a word of praise must be bestowed on the numerous and new illustrations—a welcome relief from those which have done duty in so many text-books and for so long a time. Dr. Gowers has produced a work of which the medical profession may justly feel proud, and we congratulate him on his successful achievement.

THE NORTH-WESTERN ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.—Dr. Sargent (Bolton) presided at the monthly meeting held in Manchester on the 10th inst. Some brief remarks were made on a local health report of the last century (dated 1774) in reference to small-pox in pre-vaccination times, during which the notification of infectious diseases was generally approved. On the question of how the official status of medical officers of health might be affected by the Local Government Bill a prolonged discussion ensued. The present condition of the Public Health Service was declared to be unsatisfactory, and required a radical change. Finally, a resolution was adopted, to the effect that, both as to efficiency and public economy, the appointment of medical officers of health should be entirely vested in the County Councils instead of, as provided, in the Local Government Bill.

New Inventions.

THE ATHMOSCOPE.

IT has seemed to me that much could be learned, and the diagnosis of lung affection considerably aided, by auscultation of the breath sounds as they issue from the larynx into the oral cavity. The column of air which passes directly from the pulmonary vesicles and alveoli along the bronchioles, bronchi, and trachea, conveys all the physiological or pathological sounds produced in the lung tissue into the oral cavity, and thence into the outer air; and the above-named apparatus has been designed for the purpose of affording a means whereby the auscultation of these sounds may be the better effected. It consists simply of a

FIG. 1.

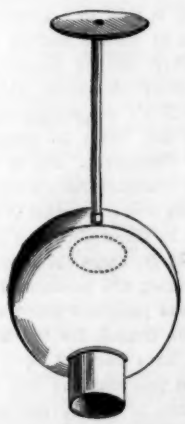


FIG. 2.

hollow metal ball about the size of an orange, made of thin "musical brass," through which the patient is made to breathe; a wide mouth-piece is fitted on at one pole, while the opposite pole is perforated by an opening of a similar size, to admit of the patient breathing through the ball. This serves as a collector and intensifier by resonation of the sounds, normal or pathological, which pass through it. (Fig. 1.) In order to convey these intensified sounds to the ear of the auscultator, a hollow metal stethoscope, the bore of which communicates directly with the interior of the ball, is attached by a screw joint to the side of the latter; or should the patient be recumbent, a flexible stethoscope consisting of an indiarubber tube, to which an ear-piece is fitted, may be used instead, as shown in Fig. 2. The patient must be directed to breathe through the ball, not through his nostrils. (Fig. 3.) The mouth-piece is made wide, so

FIG. 3.

that the mouth is kept well open, thus allowing the column of air to be comparatively free from impediment, the vocal cords then being widely separated, the tongue depressed, and the lips and teeth removed, for practical purposes, out of the way. Laryngeal sounds may be distinguished from pulmonary by the nearer approximation to the ear, and the harsher noises of the former. By this means any addition to the normal sounds of the breath is readily perceived; the crepitation or degeneration sounds of phthisis, the moister râles and rhonchi of bronchitis, the bronchial breathing of red and the crepitatio redux of grey hepatisation, or the whistling noises and rapid laboured inspirations of asthmatic affections &c., may soon be diagnosed, and a more extended stethoscopic examination made. In addition to these, a fairly accurate knowledge may be arrived at concerning a patient's capability of taking a deep inspiration, the rhythm and regularity of his breathing, and to a certain extent the capacity of his lungs. Simple as is this instrument in aim and construction, I hope it may not be without a real use in aiding the diagnosis of lung disease.

Woolwich Infirmary. J. MATTHEW CAW, M.B.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

THE following summary of the conditions relating to the use by Fellows and Members of the new work-rooms at the College has been issued:—

Subjects of Research.—Anatomy, Physiology, and Pathology, Human and Comparative, including Histology; Hygiene and Therapeutics in their relation to Surgery.

Conditions of Study in the Work-rooms.—Appointments will be made by the Council for definite periods. When application is made for an appointment a prospectus or description of the proposed investigation shall be sent in, with as complete a list as possible of the necessary instruments and apparatus. No new line of research, other than that originally approved by the Council, shall be undertaken without their previous sanction. Reports of progress shall be made to the Council at stated periods of investigation. The place and mode of publication of results of work shall be determined by the Council. If any assistance be required the investigator may provide it, but the person or persons proposed must be approved by the Council. No fixed hours of attendance will be required, but a record must be kept of actual hours of daily work. The necessary instruments and materials will be provided and expenses of investigation will be defrayed by the College, but no purchase of any additional instruments or apparatus shall be made without the sanction of the Council.

MIDLAND VOLUNTEER MEDICAL ASSOCIATION.

THE third annual meeting of this Association was held on April 26th at the Great Western Hotel, Birmingham, when Surgeon Freer read the annual report, in which the committee recorded the continued usefulness of the Association and the additional interest taken in ambulance work. The report also stated that there were at present thirty-nine members, most of the battalions and batteries in the Midlands being represented, the committee expressing a hope that members would induce their friends in the Volunteer Medical Service to join. The annual manœuvres had been held at Oxley Manor, by invitation of Colonel Gough and the officers of the 3rd Volunteer Battalion, South Stafford Regiment, and had been highly satisfactory. On the invitation of Colonel Lord Burton, it was decided to hold the annual field day this year at the encampment of the 2nd Volunteer Battalion, North Stafford Regiment in August, and a vote of thanks was accorded to Colonel Lord Burton, Surgeon-Major H. M. Morgan of the above regiment being elected president of the Association for the year. Surgeon E. S. Freer was re-elected honorary secretary, and the names of Surgeon F. H. Appleby, 4th Volunteer Battalion, Nottingham Regiment, and Surgeon J. S. Wilson, 2nd Volunteer Battalion, South Stafford Regiment, were added to the Committee. The question of amalgamation with the Volunteer Medical Association was brought forward, and it was decided that the President and Secretary (both being members of the Council of the Volunteer Medical Association) should lay the subject before that Council at their next meeting, and report to the members at a special general meeting to be called for the purpose. The subject of the Royal Warrant for a reserve of medical officers was also discussed, the feeling of members being somewhat divided; and it was decided to bring this subject also forward at the special general meeting.

The subscription to the Association is 5*s.* per annum, payable to Edward S. Freer, Acting Surgeon, 1st Volunteer Battalion, Royal Warwick Regiment (Hon. Sec.), 7, Newhall-street, Birmingham

THE LANCET.

LONDON: SATURDAY, MAY 19, 1888.

THE COLLEGE OF SURGEONS AND THE PRIVY COUNCIL.

AT the meeting of the Council of the Royal College of Surgeons, held on Thursday, the 10th inst., a letter was read from the Secretary to the Privy Council, stating that the Lords of the Council were willing to agree to those matters in the Supplementary Charter in which there was no controversy with the Fellows and Members of the College, provided that all controverted points were omitted from the Supplementary Charter. In such case the chief alterations allowed would be an enlargement of the powers of the College to hold property and the providing of an alternative of voting for members of Council by voting-papers for exclusive personal voting. If the controverted points were omitted, several alterations proposed by the Council would not be allowed: so that (1) the regulations of the Fellowship Examination would be made by bye-law as heretofore, and not by resolution of the Council; (2) the fee for the Fellowship by examination would still be fixed by Charter; (3) the Council would not have the power of electing more than two Members of the College to the Fellowship in each year; and (4) it would not be empowered to elect annually two Honorary Fellows.

The Council of the College agreed to accept the Supplementary Charter on this modified basis. It need scarcely be said that all the matters to which the Lords of the Council have taken exception, save the last, were throughout insisted on by the Association of Fellows. Though this Association has not gained all it fought for, it may so far congratulate itself on having introduced many important modifications into the Supplementary Charter, and on having prevented certain alterations which were designed to give the Council greater freedom with less responsibility in the management of the affairs of the College. It may, however, be assumed that the various matters in which there is controversy with the Fellows and Members are only reserved for further consideration, not rejected altogether; otherwise the Association of Members would have good grounds for serious complaint.

It may be suggested that some of the members of this Association have occasionally shown more zeal than discretion, and that the main issue raised by spokesmen for the Association at the deputation to the Lord President in November last was somewhat irrelevant; yet, considering the justice of the cause, the number of signatories to the petition, and the professional and social status of many of them, it is difficult to conceive that the Lords of the Council intend permanently to ignore the scheme of reform which has been prepared by the Association. Some decision must soon be made, and there are not wanting signs that a strong appeal will, if necessary, be made to Parliament to remove those anomalies and anachronisms in the constitution of the College which many thousands of the members of the Corporation believe to be indefensible, inequitable, and unjust.

THE Medical Council will meet on Tuesday next, at two o'clock. There will be little change in its *personnel* as compared with the previous meeting. Dr. PYLE will be replaced by Dr. GEORGE YEOMAN HEATH, of the Newcastle School of Medicine, a well-known surgeon and an experienced teacher. Those who like to see the combative and independent element in public bodies will be sorry to miss the face of Dr. MCVAIL, who has been beaten in a fierce contest for the coveted post of representative of the Faculty by Dr. CAMERON, who ably represents surgery in Glasgow. The meeting is held in accordance with a resolution of the Council at its last meeting to meet as a rule at the end of May, and, if necessary, in November. There are few bodies concerning which or whose movements it is more difficult to speculate than the Medical Council. It is really tied down to certain very prosaic subjects by Acts of Parliament. But it is occasionally tempted to enter upon academic discussions of other subjects than those which have been committed to its care. The licensing bodies are apt to throw duties on the Medical Council which they should discharge themselves. Last year, our readers may remember, the conduct of a medical man in publishing a certain pamphlet which was deemed objectionable occupied the Council for the best part of two days—which might have been all saved if the body under whose diploma he practised had done its duty. It is true that the Council is rightly endowed with a judicial power, in the exercise of which it is independent of the individual bodies. But the right exercise of the ethical functions of the Corporations and Universities would greatly lighten the Council's work and lessen its expenses. We may hope that no very lengthened discussions will be needed at the coming meeting on questions of professional conduct. One of the most interesting subjects expected to be brought forward at the approaching meetings will be the Reports of the new Inspectors of Examinations appointed under the Act of 1886 in May last—viz., Dr. FINLAY, Inspector in Medicine, Mr. E. H. BENNETT, Inspector in Surgery, and Mr. A. H. F. BARBOUR, Inspector in Midwifery. These gentlemen can scarcely have completed their inspection of all the final examinations of the different bodies in each division of the kingdom. But so far as possible their work will be reported, and the reports ought to be instructive. The Inspectors are acting under an imperial statute. They are not supposed to have any partialities or even nationality, and England at least is without a national representative among the inspectors. The three gentlemen are young enough to have no insuperable prejudices in favour of systems and methods of examinations, and by common consent they are highly informed in the branches in which they have to inspect. We therefore anticipate their report with considerable interest. It cannot be an easy task to do justice to twenty or more examinations, and to say where one exceeds and another falls short of the mark contemplated by the Medical Council as that of competence. This is the only standard to be applied by the Inspectors. A university

examination is not to be judged as a test of superior knowledge, but as a test of competence for the duties of practice. The twenty bodies have all been so keen to compete in granting ordinary qualifications for practice that they have been less careful about holding high their standards, so that even university degrees and college fellowships have a difficulty in getting appraised at any higher value than ordinary qualifications. We may get hints, if nothing more, from the inspectors on this point.

It may be remembered that the question of the wrongful employment of unqualified assistants by registered medical men was referred by the Council to the Executive Committee. We may expect a report on this difficult subject from the Executive Committee, and its further discussion by the Council.

Another question of great importance which falls to be considered at the approaching meeting is that of the Practical Element in medical education. By way of saving the time of the Council and raising its reputation as an effective body, several committees were appointed at the last meeting; amongst others, the Education Committee. To this committee the "practical element" question was delegated, and we shall expect to see it treated in a practical way. Medicine is an Art quite as much as a Science, and the Practice of Medicine is only to be learnt by practice. Not the least important question for the consideration of the Council is the balancing of its income and expenditure, and it is pretty clear that this will have to be accomplished either by the curtailment of eloquence or of fees. A better arrangement of business would do much to reduce expenditure, and a little wholesome sternness on the part of the President and the Chairman of the Business Committee would do more. The profession will look for such virtues in these distinguished members of the Council, however unwelcome they may occasionally be to their more loquacious colleagues.

BEFORE the recollection of the accomplished poet and critic lately laid to rest at Laleham has had time to grow dim to our readers, it may not be amiss to inquire whether the ideas and principles of which he was the exponent have any instruction or guidance for us as practitioners of medicine. MATTHEW ARNOLD had, indeed, little in common with the modern scientific spirit, and his writings show few traces of having been influenced by the great revolution in science which will always be associated with the era of DARWIN and LYELL, of SPENCER and HUXLEY. Yet he was much more than a mere *littérateur*. He was a philosophic poet, and his criticism was in its essence a criticism less of books than of men—less of opinions than of life. It is from this point of view that his teaching concerns us. It was in truth a philosophy, however opinions may differ regarding its value; and philosophy has relations with every field of human activity, and hence with medical life and practice.

MATTHEW ARNOLD was in poetry a follower of WORDSWORTH—in philosophy a disciple of GOETHE. In poetry his guiding principle was, like that of all the Wordsworthians, consonance with nature, realism—not in the sense of the modern French school of M. ZOLA, and his motley following of sensation-mongers,—but in the higher sense of that fidelity to truth which is not inconsistent with purity and perfection of art. In philosophy his keynote was founded on his much-abused term "lucidity," by which he understood clear thinking, a resolute contemplation of things as they are, a clearing of the mind of cant, of prepossession, of prejudice, and of half-knowledge. These principles may seem too obvious to justify us in regarding Mr. ARNOLD as in any sense a founder of a new school, or an exponent of a new doctrine; but while truth is always old, yet not the less do men ever and again need to be recalled to first principles, and to be made to realise how much vital teaching lies hidden under many a seeming platitude. The philosopher of to-day, like the prophet of old, owes his living force less to his enunciation of new truth than to his power to make men *feel* what they have previously only *believed*.

Clear thinking was, then, MATTHEW ARNOLD'S chief positive ideal in philosophy, and in accord with this ideal he delighted to combat what he termed "Philistinism." The phrase was perhaps not very happily chosen, inasmuch as it is not self-expressive or obviously appropriate, but the habit of mind thus indicated is very real. By "Philistinism" we understand "inaccessibility to ideas," prejudice—national, provincial, or individual; self-satisfaction—the resting in phrases and formularies instead of searching for principles. As the Philistines were the hereditary foes of the children of light, so Philistinism in philosophy is the opposite of lucidity. It makes itself felt under various disguises—now as individual crassness, again as national glorification. The individual who boasts of himself as "a practical man," thereby implying that he exalts action above thinking, and relies more upon hand or eye than brain, is a Philistine. The man who regards the Victorian era as representing the final consummation of art, science, and philosophy is a Philistine, since he forgets the weighty words of GOETHE: "The little that is done seems nothing when we look forward and see how much we have yet to do."

Philosophy such as that here indicated has a real value for all workers in the pursuit of truth, even although it was sometimes propounded by Mr. ARNOLD with a shade of arrogance and cynicism and with a literary subtlety bordering on finesse. What better principles can be desired for our profession than the determination to see Nature as she is—not as we fancy her to be, or have been taught to see her; flexibility of mind to give new ideas a patient hearing; clearness of mental vision, and the studious shunning of prejudice or self-glorification? That the medical mind is somewhat prone to some of the phases of Philistinism may be granted. We inherit a vast mass of professional tradition, much of it very ancient, some of it of immense value; we know by daily experience that remedies and methods of treatment so often announced with much confident trumpeting are apt to prove delusive and valueless; we rightly assign a very high and definite importance to long years of personal experience, and regard with suspicion both the hopes and fears of raw inexperience. All this tends to that mental conservatism which is so marked a professional tradition—a characteristic which seems to be inevitable, and probably is the legitimate fruit of medical life and experience. With us it seems natural to reason that what has been will be, that what has stood the

test of past experience will prove its validity in future trial. Within bounds, such a conviction is a safeguard of truth, and a protection against crude theory and vicious practice; pushed beyond bounds, it is Philistinism, inaccessibility to ideas, prejudice, want of intellectual balance and mental flexibility. Many may think that the medical world of to-day is little obnoxious to this charge. Now is the era of scientific, as of social and political, reconstruction. New remedies pour in upon us like a flood. Principles and practices, the most ancient and accepted, are daily subjected to challenge and reconsideration. Yet the history of medicine shows us clearly that the usual rule is slow progress and occasional stagnation. It is in averting the excess of this natural tendency that the philosophy of MATTHEW ARNOLD may prove of not inconsiderable assistance; and, in association with our contemporaries of all shades of opinion and every department of thought, we regretfully drop a garland upon his grave.

THE notification of infectious disease is one of the subjects that should be dealt with in a general measure. It is unworthy of the Legislature to shirk the duty of asserting a legal principle on a subject applicable to all communities and kinds of community, or to leave such a principle to struggle for furtive insertion in local Bills. It looks as if our legislators in not a few matters were rather afraid of their masters, and had not the courage of their duties. This question of the Notification of Disease is an urgent one. There is much to be said on both sides, but there is nothing to be said for dealing with it in a hole-and-corner sort of way—for leaving it out of one local Bill and putting it in another. If it is wrong for a tailor in Edinburgh to suppress the fact that he has scarlet fever in his house, it must be wrong for a tailor in London to do the same; and if a tailor in Kensington is allowed to keep such a fact to himself as one with which the public may not intermeddle, then the tailor in Edinburgh who is bound to notify the same to the sanitary authorities has good reason to complain of inequality of laws. We call on the Legislature to consider this question and to deal with it in a way worthy of its importance. Let us have an intelligent and exhaustive discussion of it in Parliament. It affects the privacy of domestic life and that most precious of an Englishman's birthrights, his personal liberty. His home is no longer his castle if he may not have the scarlet fever and the small-pox without interference from the medical officer of health and his subordinates! We have got hold in this question of one of the fundamental problems in society, and it wants settling with the best intelligence that can be had. It is not any longer a mere question of compulsory vaccination, but it is the larger question of the proportion between the rights of an individual and those of the public. Our good friends at Leicester are infinitely shocked at the idea of pricking a child's arm with a lancet charged with the most beneficent vaccine fluid, but they have no compunction in swooping down on a household invaded with small-pox, and (after vaccinating all but the actual patient, though this is not to be mentioned) hurrying them all off to a place of seclusion—practically to a sanitary prison. Where is individual liberty here? Nowhere. It is gone, given up, knocked to pieces, and that in Leicester of all places, the great theatre for vindicating the rights of parents and the wrongs of children. It is in this metropolis of democracy that infectious disease is regarded as empowering the public authorities to deprive a working man of freedom, and to deny his right to work, and to use the rates of the healthy to defray the expenses incurred in enforcing this curtailment of liberty. The notification of infectious disease is the foundation of this system of sanitary government. It is obvious that if the sanitary authority is to have any control over the spread of infectious diseases, it must have the earliest information about their presence, their relations, and their movements. In Leicester this system of notification is used with great vigilance and a practical despotism. It is so devoutly believed in that the authorities have become vain of their strength and success, and delude themselves into the belief that they can defy small-pox. Be this as it may, notification is the very foundation of all good sanitary work, whether vaccination, disinfection, isolation, or anything else. All sanitary authorities are agreed up to this point, but here they develop some difference of opinion. They differ as to the system by which the sanitary authority is to procure information. Some think that a purely voluntary system is the best. This would appear to be the opinion of Dr. ALFRED CARPENTER, who publishes statistics in a Croydon newspaper meant to show that the reduction of zymotic deaths is greatest in those towns in which there is no compulsory notification of disease. Others think that the notification should be compulsory, but that the duty should devolve on the parent or the responsible householder where the infection exists. Others again think that it should devolve both on the medical man and the parent. Mr. BIDDLE of Kingston-on-Thames has reprinted from the *Kingston and Surbiton News*, and kindly sent us, a letter, with tables, giving the zymotic mortality of the twenty-eight large towns for six years under three different conditions—viz., firstly, with no compulsory notification; secondly, with notification by the householder alone; and, thirdly, with dual notification. His conclusion is that notification by the householder alone gives the best results. The percentage mortality in the three cases in the above order is 3·17, 2·67, and 3·14. We agree with Dr. CARPENTER that it is impolitic and unjust to harass and prosecute the medical attendant for non-notification. It should be enough to require notification of the parent or householder. But we cannot agree with him in rejecting all compulsory notification. Statistics are notoriously misleading; they are specially so in comparing different places in respect of their zymotic mortality, and on the strength of very imperfect data. It is quite inconclusive to argue that because certain towns which have notification had more scarlet fever in 1887 than in 1883, the notification was to blame. The variations of zymotic mortality in different years are enormous. Thus for example, in London, the mortality from small-pox in 1884 was 1251; in 1887 it was only 9. This of course has nothing to do with notification, which does not exist in London. Besides, it is of the first importance that sanitarians should know all about the very first cases of epidemics, if we are to get any further in either our knowledge of them or our control over them. The most precious opportunities of adding precision to our knowledge are constantly being lost for want of early notification of

first cases. There is some force in Dr. CARPENTER'S contention that people will suppress information of the existence of infectious disease if notification of it is to involve publicity and loss of business and work. But notification need involve neither. On the contrary, if it leads to kindly and effective help on the part of the sanitary authority, it may be most welcome and useful. The idea of notification is involved in all our sanitary legislation. Epidemics are costly and ruinous in every sense, and if the public has to pay the bill for hospital isolation and medical attendance of well-to-do people, it has a right to insist on the earliest and the most complete information. In short, we look upon compulsory notification as a logical consequence of our present sanitary system, and the part taken by statesmen should be to make it as little irksome as possible. We are certainly inclined to think that the medical profession should not be required to do more than intimate to the householder the nature of the case and the state of the law, but the subject is one of such widespread interest and of such great importance that we will willingly afford what space we can to those of our readers who favour us with their opinions.

DR. HENRY HARTSHORNE, in a paper on "Pneumonia, its Mortality and Treatment,"[1] contrasts the mortality from pneumonia in the present day with that formerly prevailing. His object may be best gleaned by quoting his own words. He says:—"My thesis is this: That the mortality of acute pneumonia, croupous and catarrhal, is decidedly greater now than forty years ago, especially when it occurs in young or middle-aged patients of previously good health; and that this increase of mortality coincides with a prevailing change of treatment, in such a manner as strongly to suggest, if it does not absolutely prove, that the principle of that change is erroneous, either in what it omits or in what it adds, or in both." In brief, his essay amounts to an attack on the present mode of treating pneumonia, and an advocacy for a return, in part at least, to the disused practice of bloodletting. He commences his argument by summarising the statements made in an able article which appeared in the *British and Foreign Medico-Chirurgical Review*, July, 1858, when "the anti-venesection movement was at its height," the reasons for the abandonment of the lancet being "change of type" according to Dr. ALISON, and a "sounder pathology" according to Dr. HUGHES BENNETT. It would be impossible to reproduce the statistics quoted by the writer from many sources; we must content ourselves with noting that he estimates therefrom the average mortality of pneumonia in the second quarter of the present century as being from 8 to 9 per cent., or less than half the present estimated mortality of 18 per cent. given by the British Collective Investigation Committee; and he asserts confidently that the fatal cases include a larger proportion of individuals in the prime of life, and of previously good health, than was the case half a century ago. Such a conclusion cannot be attributed to improved diagnosis, for, if anything, this argument would tell the other way, by the inclusion of cases of tuberculosis in the list of the pre-stethoscopic period. As to the "change of type" theory, whilst admitting the possibility of a lowered general vitality from overcrowding in large towns, and other causes of modern life, it is a fact that the average duration of life has increased from improved sanitation; and he does well to point out that this theory was promulgated coincidently with the abandonment of lowering measures of treatment. If, then, neither the nature of the disease nor the vitality of its victims can be said to have undergone any change, what is there left but to attribute the alleged heightening of mortality to altered lines of treatment? It is the substitution of bloodletting and purging—i.e., of depleting measures—by restorative and stimulant methods, or the less active "expectancy," and reliance upon antipyretics—that constitutes the radical change to which Dr. HARTSHORNE refers. He advocates, therefore, a return to a discriminate degree of local and general bloodletting, on the ground of its lowering vascular tension, and even on the more ancient ground of elimination. The prescription of saline purgatives, diuretics, and diaphoretics should, he holds, be reintroduced, whilst opium ought to be almost entirely banished. Nor does he see that we have gained much by the introduction of antipyretic drugs in place of the old-fashioned febrifuges above indicated. The heart failure, which forms so prominent a feature in the induction of the fatal issue, depends, he holds, upon the obstructed pulmonary circulation, and indicates a recourse to depletive measures rather than to the "early and free use of alcohol" which Dr. TODD advocated in all acute diseases,—a practice stigmatised by Dr. HARTSHORNE as "extreme, unjustified, and often injurious." He does not, however, lay such stress upon the influence of the febrile state in contributing to cardiac asthenia as might have been expected. Nevertheless, we do not consider that Dr. HARTSHORNE'S arguments are to be lightly set aside. The weak point of course lies in the possible unreliability of the data upon which they are based. Statistics, especially of clinical facts, are notoriously misleading, and it must be especially difficult to institute a just comparison in records which date from what may, without presumption, be styled the "pre-scientific" era. It would be difficult in the present day to bring about such a reversion to old practice as Dr. HARTSHORNE desires without a corresponding change in ideas concerning the nature of pneumonia, and the dangers that have to be averted by treatment.

[1] Transactions of the College of Physicians, Philadelphia.

Annotations.

"Ne quid nimis."

SIR WILLIAM JENNER, BART.

AT a meeting of the Royal College of Physicians on April 26th, 1888, on the motion of the Senior Censor, seconded by Dr. Quain, the following resolution was adopted unanimously: "That the cordial thanks of the College are due, and are hereby offered, to Sir William Jenner, Bart., K.C.B., M.D., for the ability and judgment with which he conducted the business of the College during the seven consecutive years in which he filled the office of president, and also for the time he devoted to the duties of that office, and for his endeavours to advance on all occasions the interests of the profession." On Friday, May 11th, a deputation consisting of the President, the mover and seconder of the resolution, and the Registrar, waited on Sir William Jenner, at his residence

to present the resolution in the name of the College. At the opening of the College Comitia on the 14th, the President informed the Fellows that the deputation had seen Sir William Jenner, who, in acknowledging the vote of thanks, had said that he attributed such success as had fallen to him to having, when engaged in any particular line of duty, whether pathological investigation, clinical teaching, or medical practice, devoted himself to that one work alone. He had further expressed the most earnest hope that the College would never depart from its practice of admitting Fellows by election, for it embraced considerations which no other method could take into account. We need hardly say that the profession as a whole cordially concur in the resolution of the College. The presidency of Sir William Jenner has been notable quite as much for the increasing influence and prosperity of the College, as for many an instance of its intervention, wisely and justly directed, in the interests of the medical profession. The Presidency of the Royal College of Physicians is the most exalted position in the medical profession; and it is a fortunate circumstance when one so universally respected for his integrity and wisdom as is Sir W. Jenner is selected to fill that office. It must be some satisfaction to him to know that his tenure of the presidency has met with general approbation, and that the vote of thanks he has received cannot be regarded as a merely formal compliment, but as a heartfelt expression of gratitude for the great services he has rendered to the profession.

THE NATIONAL PENSION FUND FOR NURSES.

IN commenting last week upon the reply which has been made to our criticism of the Pension Fund prospectus, we were driven to complain of the manner in which the defenders of the present scheme conduct the discussion. Since then publicity has been given to a reply by the actuary, which is not yet, as we understand at the time of writing, in circulation, and to which therefore we can only refer as it appears in what we are informed is a full setting forth in the pages of a weekly publication. The tenour of this document compels us to renew and emphasise our complaint. The actuary first seeks to make a small point against us in respect of what he supposes to be a misquotation on our part of the Post Office annuity figures. We wrote on the 28th ult.: "The Postmaster-General returned the new business of this class last year as 87 annuities." Our critic assumes that we meant to write "the new business of last year," and then ascertains by reference to a report, not made by the Postmaster-General, but by the National Debt Commissioners, and not made last year, but this year, that the deferred annuity business of 1887 comprised 100 transactions. The report from which the actuary quotes was ordered by the House of Commons to be printed on the 8th ult., and was circulated among the public on the 5th inst., coming into our hands a few days afterwards. It surely is a misconstruction to give as the figures which we purported to quote figures taken from a return to which we did not refer, and which had not issued from the press when we were writing. If he will now turn to the document which we did cite, he will find that our original quotation was perfectly correct. Had we even committed the error which he attributes to us, the point would hardly have been worth making; for what does it come to? It is a condition of the continuance of the Pension Fund that 1000 annuity policies should be issued in two years. Does the actuary argue that because the Post Office, which appeals to all classes of the community, has succeeded in issuing 100 policies in one year, his society has a good chance of issuing 1000 similar policies in a period of two years, appealing only to the comparatively small class of nurses and hospital officials? But this leads up to an argument directed to the point of substance of our criticism. We pointed out that three "open market" quotations were greatly below those of the Pension Fund table. The actuary replies: "These open market rates are for male lives, those for the Pension Fund being for female lives." This contains a very serious accusation, but it is not true. The rates quoted by us are male risk rates in the sense that the companies named offer by their prospectuses to accept male risks upon these terms, and they are *female risk rates in exactly the same sense*, for the tables from which we have quoted *made no distinction between male and female risks*. The companies invite anybody, whether male or female, to propose upon these terms, and the figures we have quoted represent, therefore, available alternatives to the Pension Fund table open to female nurses. The actuary has something more to say upon this point. The male rate, says he, for the benefit under discussion is £2 2*s*. This is new to us. The prospectus furnished to us gave no separate tables for male risks, nor any intimation that such tables had been prepared. Table 1, from which our quotations were made, is headed "For Matrons, Sisters, and *Nurses*," but no hint is given that *female nurses* are alone meant, nor had we, until this announcement by the actuary was made, any idea that the table was intended to be so restricted in application. But now we understand from him that the scheme stands thus: Entrant in the twenty-fifth year of age; benefit, an annuity of £15 per annum, to be enjoyed after the attainment of sixty years. Annual premium to a male nurse or attendant £2 2*s*.; to a female nurse, £2 10*s*. Difference in favour of the male eight shillings a year, equal to 16 per cent. discount. If this is really so, and if this example fairly represents the proportions in which it is proposed to admit male and female members respectively to the benefits of the fund, we do not hesitate to say that this is in our judgment the worst feature of this badly elaborated scheme. The disproportion is simply preposterous. First-rate insurance companies, as we have shown above, are content to make no distinction at all for this purpose between male and female risks. The only pretence of justification that the critic can have is to be found in the circumstance that the observations made upon the mortality of Government annuitants show a disproportion such as this between the value of male and of female life respectively. But surely, if anything were wanted to condemn the proposed adjustment, the case of the female Government annuitants would supply it. This class exhibits female life at its very best under the hygienic point of view. The freedom from anxiety and easy circumstances to which a Government annuity unmistakably speaks are reflected in the vigorous vitality and correspondingly high annuity values brought out by the Government Female Annuitants Table. Because women so circumstanced have displayed a vitality superior to the observed vitality of men in the degree represented by a difference of 16 per cent. in a pension premium, therefore women occupying a wholly different position, pursuing an arduous profession, constantly in immediate contact with disease, working as hard as men work, with a never-failing weight of anxiety and sympathy added to their toil—women so circumstanced are to be assumed to have an equal advantage in point of vitality with the ladies laid up in lavender, whose mortality experience has been tabulated, and are to be charged an additional premium on that hypothesis. The proposition will not bear stating, and nothing could more strikingly display the utter inattention to the wants of nurses and the conditions of their life with which the plan under discussion has been prepared. It is a matter of great regret to us that this discussion should have grown to its present dimensions and should have assumed the character it has. But we

have a duty to discharge, not only to the nurses, for whom we have a special right to speak, and to ourselves when made the subjects of such groundless accusations, but also to the donors of the Guarantee Fund, whose objects we cordially share, and whose princely liberality we have from the first most amply recognised. The best way, as we judge, to save the scheme which they have launched from hopeless miscarriage is fully to discuss the details which have been supplied by those to whose hands they have entrusted its administration. In this spirit we have taken up the discussion, and in this spirit we shall carry it through.

CHILDREN'S DRESS.

ONCE more our parks, squares, and gardens indicate a growing conviction that summer is at hand, this idea being shown not merely by the soft green hues of the trees and the timid fresh appearances of flowers, but also by the sudden change of attire of the children playing about. Fur-lined hoods are making way for light sun hats; thick woollen garments are disappearing, and thinner clothing is taking their place; gaiters are removed, and little legs exposed with a thin covering of sock. These changes, we are told, are necessary because the children come in so heated from their play. This is doubtless true, and an alteration which is needful probably works no harm when the children come home to bed or to play in rooms free from draught. But harm may result from over-caution, from discarding capes and leggings while the body is still warmly enveloped in flannel. The whole *rationale* of children's dress is that the warmth should be evenly distributed. It is at once irrational and unsafe to leave the neck, arms, and a part of the chest exposed, while warmth of the lower portions of the body is maintained with winter precautions. The brisk movements of a young child will frequently counterbalance the errors of dress, by distributing heat to all parts through increased activity of circulation; but when the child runs to a shady seat to rest and to cool, such clothing is full of danger. Poor children with a breezy covering of rags which allow of equal cooling over the whole body are much more safely clad in this season than those whose bodies are closely clothed, while arms, legs, and neck are left exposed to the wind.

ALCOHOLIC NEURITIS.

A NEW contribution to the histology of peripheral neuritis has been made by Professor Eichorst of Zurich.[1] The case he describes is that of an habitual drunkard, who died from alcoholic paralysis after six weeks' illness. The symptoms began with incoördination and then paralysis of the legs, followed by paralysis of the extensors of the wrist, with rapid wasting of the paralysed muscles, tenderness of the muscles, some cutaneous anæsthesia, abolition of reflexes, and ultimately vesical and rectal paralysis. At the post-mortem examination, no gross lesions could be seen in the nerve centres. The brain was not examined microscopically, but the cord showed some asymmetry in the anterior cornua, and some recent hæmorrhages in the grey matter in the dorsal region, with thickening of the bloodvessels—changes which did not suffice to explain the general paralysis. The spinal nerve roots were found to be normal. The tibial and radial nerves, on the other hand, were found to be profoundly diseased, osmic-acid preparations showing very extensive degeneration and atrophy, with absence of the axis cylinders in a large proportion of the nerve fibres. Tracing the nerves to their peripheral terminations in the muscles, Professor Eichorst found the lesions to be more advanced and complete there than in the nerve trunks. Indeed, within a muscle there was not a single normal nerve fibre. Nor were the lesions of these intra-muscular nerves limited to degeneration as in the nerve trunks; but each degenerated fibre was surrounded by numerous laminæ of connective tissue produced from the endoneurium and perineurium. It would seem as if the existence of the degenerate nerve substance had excited inflammatory change around it. Another remarkable fact was that the muscular fibres did not exhibit the trophic changes usually met with in neuritis, although in the vicinity of the diseased nerve-endings the muscular fibres were atrophied apparently secondary to the perineurial lesion. Professor Eichorst therefore proposes to term the condition "neuritis fascians," as denoting what he considers to be the essential feature of the change—viz., the inflammation of the nerve sheath, and the extension therefrom to the interstitial tissue of the muscles. He points out that similar changes in muscles have been described by Fraenkel in phthisis, and by Eisenlohr in infantile paralysis; the former raising the question whether the ensheathing bands of connective tissue arose from the bloodvessels or the neurilemma. Eichorst does not infer that neuritis fascians is special to alcoholic paralysis, but that it is an important feature of it. Certainly the clinical phenomena of "peripheral neuritis" harmonise with the occurrence of lesions within the muscles themselves, and we may direct the attention of pathologists to the more precise determination of such lesions, which in all probability precede the degeneration of fibres observed in the nerve trunks. The latter change has been amply studied, but the former, and indeed the essential change, has not as yet been much dealt with.

[1] Virchow's Archiv, cxii., Hft. 2.

OFFICIAL HEALTH MEMORANDUM.

IN addition to the memoranda on subjects relating to health to which we recently adverted as having been issued from the Medical Department of the Local Government Board, we have received one on the "Proceedings which are advisable in Places attacked or threatened by Epidemics." In the document in question, Dr. Buchanan draws attention to the general principles which should govern all sanitary officers in regard to filth-removal, and he explains the desirability of liberally using chemical agents as disinfectants during any such processes which may be rendered necessary by reason of cholera or enteric fever. The need for the protection of all sources of water from risk of pollution is also referred to, and there is a special notice as to the liability of leaky water-pipes to act as land drains and to receive foul matters as well as land drainage through their leaks. This danger is very generally admitted in cases where intermittent water supplies are in question, but the memorandum goes further than this, and points out that "such leaky pipes, running full of water with considerable velocity, are liable to receive, by lateral insuction at their points of leakage, external matters that may be dangerous"; and it is added that ignorance of this fact has probably baffled many inquiries in cases where water services have been the means of spreading disease. Following on this come a certain number of injunctions as to the boiling of such waters as must be resorted to, notwithstanding possible contamination; the investigation of milk supplies, with especial regard to the health of cows; and the paramount importance of boiling all milk at once upon its reception into a house. The various remedial measures to be adopted in houses and places where the different infectious fevers may be prevailing are next respectively set forth; and lastly comes a statement of the preferable methods of disinfection. For the purposes of the sick room a solution of perchloride of mercury is recommended, and the same agent is suggested for use in dealing with excreta in such cases as cholera and enteric fever. For

the more solid contents of privies and ashpits sulphate of iron (green copperas) is recommended, and for the disinfection of rooms the burning of sulphur is the plan that evidently receives most favour. Of course, these processes in no way supersede the need for the provision by sanitary authorities of an apparatus in which bulky and other articles can be dealt with by heat—preferably steam under pressure. Neither must it be forgotten that, for articles that can properly be subjected to that process, boiling for a few minutes stands amongst the foremost of disinfecting methods.

THE MIDDLESEX HOSPITAL.

H.R.H. THE DUKE OF CAMBRIDGE presided at the festival dinner of the Middlesex Hospital at the Hôtel Métropole on the 15th inst. There was a large company, including Lord Sandhurst, Lord Brougham and Vaux, Lord C. Bruce, Major Ross, M.P. (chairman of the weekly board), Professor Flower, F.R.S., and almost all the members of the weekly board and medical staff. In giving the toast of "Prosperity to the Middlesex Hospital" his Royal Highness said that he had that day had an opportunity of visiting the institution, which he highly praised. It had existed for nearly a century and a half, and its management had spared no pains to maintain it fully equipped with modern requirements. With an annual roll of nearly 3000 in-patients and 30,000 out-patients, its capital had to be yearly encroached on to meet the growing expenditure, which the income derived from subscriptions fell far short of doing. Last year the deficit amounted to nearly £10,000. Major Ross, M.P., in his reply to the toast, alluded to the fact that a large sum, derived from the Lady Probationers' Fee Fund, was expended annually in pensions to nurses and others who had been long in the service of the hospital, as well as for the relief of nurses who were placed on the sick list. Mr. Hulke responded on behalf of the medical staff. The subscription list for the evening amounted to £3000. It may be added that at his visit in the afternoon his Royal Highness not only inspected all the wards, but also the new Nursing Institute, the Medical School, and the Residential College for Students, and expressed himself much gratified with what he saw.

LIME-JUICE AND OTHER ANTISCORBUTICS.

AN important question has arisen, whether ship owners are compelled to serve out lime-juice and other antiscorbutics to crews which are not coming to or going from the United Kingdom. It is said that the law as laid down in the Merchant Shipping Act of 1867 is impliedly restricted to vessels only bound from or to the United Kingdom. Without entering into the arguments that have arisen with regard to the wording of the Act of 1867, we must express a hope that a decision will be arrived at which will fully defend the British sailor from the possibility of being deprived of the protection against scurvy which at least lime-juice affords. The question raised is a nice one, and special pleaders no doubt will be able to adduce reasons for and against the powers of the Act; but should there be the slightest difficulty as to the right interpretation, Parliament must at once proceed to amend the Act or pass a new one. At first sight the danger seems slight. A vessel sails from England and returns to England, and under such circumstances how can any deficiency occur? But those who argue thus forget the exigencies of the modern mercantile marine which ocean telegraphy has brought about. A vessel sails, say, from Liverpool to Sydney; at Sydney a message awaits the captain, informing him that when he had discharged his cargo at Sydney he was to sail to Rangoon to take a cargo to Bombay, and at Bombay he might be chartered to sail for the coast of South America to pick up another cargo. In the case of one ship which in this way had made the tour of the world, the vessel did not return from the port in the United Kingdom from which it sailed for more than two years and a half, and had not the provisions of the Act of 1867 been fulfilled in this case, the result would have been most deplorable. As it was, a case of scurvy did occur on the homeward voyage. It will thus be seen that if the Act be read as only to apply to the voyage from and the voyage to the United Kingdom, the sailor may be deprived of all protection if the vessel be called on by the demands of trade to sail for indefinite periods between foreign ports. Parliament ought therefore at once to decide the point and put the clauses of the Act into language less ambiguous. A British vessel leaving any port in the United Kingdom should carry a sufficiency of lime-juice and other antiscorbutics to provide for the crew till their return to the United Kingdom, irrespective of any sailings between foreign ports in the interval. Indeed, we should be glad to see the question of the provisioning of the mercantile marine subjected to fresh legislation. With the introduction of refrigeratory storage chambers, there is no need that poor Jack should be fed on salt junk and dried peas, when he might have fresh meat and green vegetables daily.

THE NORWICH FRIENDLY SOCIETIES' INSTITUTE.

THE Tenth Annual Conference of the Friendly Societies' Medical Alliance was held recently in York, and the members seemed satisfied with the progress of this movement. The Chairman said there were fifty medical associations in the Alliance, representing 150,401 members. All we can say is that these institutions do not give the same satisfaction to the medical profession. Not only does the profession itself regard the rates of payment as miserably inadequate to the work done, and unworthy treatment by provident working men of their medical advisers, but the medical officers themselves, whenever they speak, do so in a tone of discontent and dissatisfaction. They have much work and little pay, and too many masters; and are constantly appealing to the profession for pity and giving notes of warning to others not to be led into taking such appointments. We have before us the report of the Norwich Friendly Societies' Medical Institute. For two medical officers there were 41,856 consultations in the year and 12,876 visits, being an average of 17 visits per day and 57 consultations per medical officer. We gather that the salary of each medical officer is about £250. The committee, in their report, say that unfortunately they have been compelled to make a change in the medical staff, and, if our information is correct, the gentleman then appointed has been again changed. We cannot advise these appointments, or believe that the medical system of these institutions is the best either for the officers or the members.

PAINTED AND POWDERED CHILDREN.

THE absurdities of fashion appear to have reached their climax—if, indeed, they are capable of limitation—in a custom which is said to prevail among Parisian mothers of the wealthy classes. Not content to see their children free from illness and wearing the rosy hue of health, they have called in the aid of dyes and powders to impart what they consider to be a still more becoming complexion. This injurious practice, moreover, appears to be restrained by no consideration for the age of the children. Mere infants hardly able to walk are, it is said, to be seen thus unattractively decorated, and their future, whether as regards comfort or appearance, is evidently of little account in the eyes of their senseless parents. It will be pretty generally admitted by unprejudiced persons

that all such artificial methods of producing a form of so-called beauty must fail to achieve any real success, inasmuch as they ignore the important position of health as a constituent of beauty as expressed in the features. The evil consequences of loading with paint or powder the secreting glands on whose free action purity of complexion so largely depends, require no description, They have already been often and fully discussed, and moreover, the evidence of Nature's retaliation is only too noticeable in the dry and wrinkled countenances of many who have sought to improve her handiwork with the shabby devices of the cosmetic art. Such clumsy meddling may have to be permitted, though it cannot be excused, when applied by the devotees of fashion on their own behalf. It is not permissible, however, to suppose that those of them who may have been entrusted with the care of children have a more extended liberty. The power of doing mischief in this way has no place among maternal privileges, and though the ordinary law can hardly be invoked in a question of this kind, the matter is one which well deserves the exercise of the *jus mariti*.

EXPERIMENTAL RESEARCHES ON TUBERCULOSIS.

DR. CORNET publishes in the *Internationale Klinische Rundschau* an account of a series of experimental investigations on tuberculosis which he has been conducting for the last two years in the Berlin Hygienic Institute. The experiments were divided into three groups: the first of these dealing with the air and dust in dwelling-houses, hospitals, &c.; the second group comprising observations directed to the parts of the body affected by tubercle artificially introduced in different situations; and the third group consisting of attempts to solve the problem of the possibility of rendering the tissues unsuitable as a cultivating medium for the tubercle bacilli. In order to examine the walls and floors of rooms the surfaces were washed over with sterilised sponges, which were then used to inoculate broth, the resulting culture being injected into the abdominal walls of three guinea-pigs. The animals (if they did not die of some intercurrent affection) were killed forty days later, and a careful necropsy made. Twenty-one hospital wards, in which most of the patients were phthisical, were examined in this way, the result being that from the dust of fifteen of them tuberculosis was set up. Similar observations made in lunatic asylums showed that the walls of these establishments are very frequently infected with tubercle. Private houses where persons affected with phthisis had lived gave likewise very distinct positive results; out-patient departments and surgical wards appeared, on the other hand, to harbour no tubercle. One important observation made was that where phthisical people had been in the habit of expectorating on the floor, this was certain to yield infectious cultures, whereas in cases where handkerchiefs or spittoons had always been used the liability of the dust to prove infectious was very greatly diminished. Regarding the organs affected, Dr. Cornet fully confirms Koch's observation that, except the actual point of introduction, the organs most affected are the nearest lymphatic glands: thus, when inhalation is the mode of infection adopted, the bronchial glands are the organs most affected; when injections are made into the abdominal walls, the inguinal glands of the side selected show the greatest degree of tuberculous infection; and when the virus is introduced directly into the abdominal cavity, the omentum is the part most affected. The therapeutical observations were made with tannin, "pinguin," sulphuretted hydrogen water, menthol, corrosive sublimate, creolin, and creasote, all of which were given in much larger doses in relation to the body weight than anyone would think of prescribing for human beings. In the case of corrosive sublimate toxic symptoms were induced before the tubercle was injected, and care was taken with all the other remedies that the system was well saturated with them. Notwithstanding all this, however, every animal died, not the slightest hindrance being apparently caused to the development of the tubercle bacilli by any of the remedies. Dr. Cornet remarks that of course the results of experiments on guinea-pigs must not be taken as necessarily holding good for human subjects, as he has himself repeatedly proved the great value of creasote in the treatment of phthisis. Again, some infected guinea-pigs were sent to Davos, others being kept in Berlin, the conditions of life of the two sets of animals being rendered as similar as possible. All of them died in about the same time, and no perceptible difference was found in the degree of tuberculous infection of the tissues in the two classes of cases. Dr. Cornet promises to publish the details of all his observations in the *Zeitschrift für Hygiene*.

LORD RANDOLPH CHURCHILL ON HOSPITALS.

LORD RANDOLPH'S speech on hospitals and their claims at St. Mary's was very good. It was a little too statistical perhaps. But the rich men of the country, and the rich ladies too, must be growing insensitive to appeal if they can resist the argument. Our hospital system is a voluntary one, and has all the grace and kindness that willing subscribers only can give. It is the fountain and basis of medical education, without which the medical skill which serves and guides the rich would not be forthcoming. Finally, the working classes are helping themselves more in Birmingham, in Glasgow, in the Potteries, and in London through the Hospital Saturday Fund. Lord Randolph showed forcibly the want of diffusion in our hospital accommodation. It is concentrated within a radius of a mile and a half of Charing-cross, whereas the population for which it is intended is scattered over an area within a radius of seven miles. There is no doubt a great mass of physical suffering in the homes of the poor which ought to find accommodation and relief in the hospitals, but which cannot be entertained for want of funds. The authorities of St. Mary's are to be thanked for enlisting so eloquent an advocate as Lord Randolph in the cause of hospitals. When there is so much money and so little employment for it, the time is favourable for rich men to relieve the hospitals of debt and enable them to fill up the vacant beds.

DENTAL ANOMALIES.

THE correlation that exists between the hair and the teeth has been remarked by many observers. Thus Darwin, in "Animals and Plants under Domestication," mentions the deficiency of teeth in the hairless Egyptian dogs, and an analogous case of a Hindoo family in Scinde, in which ten men in the course of four generations were furnished in both jaws, taken together, with only four small and weak incisor teeth and with eight posterior molars. The men thus affected had very little hair on the body, and became bald early in life. Darwin also quotes the case of the Burmese hairy family, in which, unlike the preceding, there is an abnormal growth of hair on the skin and a deficiency of teeth. Mr. Crawford, in "Embassy to the Court of Ava," in 1826, describes Shwé Maong, the father, then thirty years of age, as being of the average height of the Burmese, covered with silky white hair upon all parts of the body, especially over the shoulders, where it was five inches long. He had only four incisors in the upper jaw, and in the lower four incisors and the left canines. He stated that he did not shed the temporary teeth till twenty years of age. King Theebaw presented him with a wife, and one at least of several children born, and that the sole surviving one, was born hairy. She (Maphoon)

was stated by Mr. Crawford and by Captain Yule, who visited the coast of Ava later, to be almost edentulous. Recently Maphoon, now about seventy years of age, has been on exhibition at Washington, and having some trouble with the mouth, was seen by a dentist (Dr. Daly) of that city. He removed fifteen teeth, showing that the deficiency in number was not so great as was thought to be the case; but that teeth and hair are correlated to some extent was shown by two pairs of teeth being "geminated," two upper molars being joined together by their roots, and a lower second molar and wisdom tooth united by both crown and roots. One son of Maphoon is also on exhibition, but his mouth was not examined. The hairy Burmese family were on exhibition in London last year, but we do not know whether any examination was then made of the dental organs.

EFFECT OF ANÆMIA ON THE GASEOUS CHEMICAL CHANGE.

IN order to determine the effect of acute anæmia on the gaseous chemical change, or gaseous metabolism as he calls it, Dr. M. F. Kandaratski, of St. Petersburg, has experimented on a number of dogs by abstracting a portion of the blood, thus producing a condition analogous to that of acute anæmia, and estimating the gaseous change before and after the operation. His idea was to discover whether the intravenous injections of defibrinated blood, saline solutions, &c., in acute anæmia act in a chemical manner by restoring the gaseous metabolism which may be supposed to be lessened by the diminution of the red corpuscles. The observations made showed that, whether a small quantity of blood equivalent to 29 per cent. of the whole, or a large amount equal to 62 per cent., or in one case to 73 per cent. of the whole, was abstracted, no alteration was caused in the gaseous chemical change. His experiments were conducted with great care, each observation lasting for three days, and the mean of two observations being taken. He was also careful to eliminate any error that might arise from food.

SPRING RISKS.

THE recurrence of spring surroundings revives the need for the usual spring warnings. Bright sunshine is apt to prove a delusion if trusted too implicitly. Warm clothing is but too readily discarded in favour of light airy garments, which seem more seasonable. Whole habits of life, with their customary precautions, are liable to be set aside hastily, in deference to the appearance of bright weather. The range of light occupation widens, and the younger members of the community seek the river or the cricket field and tennis lawn, and at the same time they discard warm clothing as unsuitable for the brisker movements, and revert to the garments of the preceding summer. This is reasonable enough if the sites of the lighter enjoyments of their youth are within close access of their homes, allowing of a rapid change to warmer clothing as the cool of the evening approaches, and the waning light warns them to cease from their labours of pleasure. It should not be forgotten, however, that the conditions of space in London render it rarely possible for this rapid change to be effected. A journey by rail must mostly be encountered on the return home, and with its draughts and delays constitutes a serious risk if precautions have not been adopted to prevent rapid and harmful evaporation from a perspiring skin. The interests of the game mostly increase as the day declines; the players put forth more vigour to make the most of the remaining light; the rowers pull a faster stroke as time runs short and they are still some distance from the station. It may be regarded as inevitable that sunset should find all these votaries of pleasure flushed with their exercise and offering a ready prey to the cooling breezes which so often follow. Fortunate, indeed, are those who escape with merely a nasal catarrh or a mild laryngitis, after braving such perils with the carelessness of youth. Though medical men may incur the false charge of being alarmists, they should not weary of proclaiming that the brightest spring morning may yet be followed by a chill wintry evening, full of danger to those who are forgetful of this fact.

INFECTIOUS DISEASE IN THE OUT-PATIENT ROOM.

THE effects of a hospital for good or ill have during the present week been the subject of inquiry in a court of law, and a point mentioned in evidence deserves consideration by those who have the management of these institutions. There is often some laxity in making proper provision for the isolation of cases of infectious disease applying for relief at the out-patient room. Persons suffering from this class of malady and ignorant of the nature of their disease are frequently to be found in the waiting room, and it is incumbent on the hospital authorities that every care should be taken to prevent the spread of their disease to others with whom they may come in contact, both in the hospital and afterwards in the public street. The Metropolitan Asylums Board lose no time in removing to their hospitals all cases of fever and small-pox thus discovered; but it is necessary that such patients should be promptly isolated pending their removal, and there should be in connexion with every out-patient department a room specially set apart for this purpose, and so placed that the infectious persons may be conveyed to the ambulance without necessitating that they should again pass through the often crowded waiting-room. Further, each hospital should bear in mind its responsibility with regard to those cases of infectious disease which are not admissible into the Metropolitan Asylums Board's hospitals, and should itself undertake the removal, either to their home or to the London Fever Hospital, of all persons suffering from measles or diphtheria, unless it is prepared to treat these diseases within its own walls. Hospitals are necessary for the treatment of the sick poor and for the study of disease, but every possible care should be taken to reduce to a minimum any risk which may result from the occasional but inevitable association of infectious with non-infectious persons.

INTERMITTENT ALBUMINURIA.

A VERY interesting contribution to the gradually increasing literature with respect to those anomalous forms of albuminuria which occur in persons apparently healthy has just been made by Dr. Merley (*Hôpitaux de Sainte Etienne*) in a work in which he ably reviews the investigations of previous observers, and adds numerous observations of his own. He confirms the original statements of Dr. Pavy in this country and Dr. Teissier in France as to the cyclical character of the intermittency in many of these forms. He also states that the urine in these cases contains an excess of colouring matter, a considerable quantity of albumen, an exaggerated elimination of urates, and a marked increase in the elimination of urea, in this point confirming the observation of Dr. Ralfe (THE LANCET, Aug. 23rd, 1886), who accounted for this condition by referring it to increased hæmolytic action of the liver, which, causing a too rapid destruction of blood-corpuscles, increased the amount of urea and colouring matter in urine on the one hand, and led to albuminuria on the other. Dr. Merley investigates very closely the various hypotheses which have been advanced to account for the phenomena of cyclical and intermittent albuminuria, and which he divides into (1) the mechanical

theory, (2) the theory of changes in the glomerules, and (3) the theory of a special constitutional tendency. To this last view he gives his adhesion, believing that the uric acid diathesis is the predisposing cause of this condition. With regard to the views advanced by Dr. Merley and other writers respecting the nature and character of these cases of intermitting albuminuria, we are convinced that no one cause can be assigned that will explain the different phenomena observed in individual cases, and that, in fact, this transitory albuminuria can be brought about by a variety of conditions. In some cases the mere act of rising, even without the influence of the morning meal, will induce it; in others it is distinctly the ingestion of food, after the longer abstinence of the night, at breakfast; in others, the exposure of the body to cold whilst dressing, or the action of the bath. It is this class of cases more especially, in which the cyclical phenomena so well described by Dr. Pavy are chiefly observed. In other forms, again, the albuminuria is paroxysmal rather than cyclical in character, such as those described by Dr. Ralfe, and which are generally accompanied by some dyspeptic trouble and more or less sallowness. In others the albuminuria is probably of a reflex character, being associated, in young persons especially, with sexual derangements. With regard to the peculiar constitutional tendency which may bring about this tendency of albumen to pass so readily into the urine on slight occasions, we are not inclined to throw the whole blame on uric acid or gouty diathesis. We think it may be fully shared with such dyscrasias as syphilis, malaria, and rheumatism, inherited or otherwise.

HARD TIMES IN THE PROFESSION ABROAD.

COMPLAINTS of the unfair competition of hospitals and charitable dispensaries with private practitioners are common enough amongst ourselves both in London and in other large towns; but the evil, great as it is, and serious as we find it, is nothing compared to the state of things existing in many continental cities. For example, the Prague correspondent of the *Internationale Klinische Rundschau* makes a sad lamentation over the decline of medical practices in Prague, declaring that a very large number of Bohemian practitioners are now making less than £100 a year, with a prospect of a still further diminution of their incomes in the near future. This is due mainly to two causes—the abuse of hospitals, and the ever-growing competition in the profession from the overcrowding that is going on in its ranks. In order to prove the existence of the abuse of charitable institutions the writer alluded to has collected a number of statistics giving the average annual number of patients relieved in both the Bohemian and German hospitals in Prague—a city which, it should be stated, has only a population of about a quarter of a million inhabitants. The in-patients averaged about 7000 and the out-patients about 50,000, most of whom received, in addition to advice, medicine and surgical appliances gratis. This would seem to bear out the complaint of the practitioners, that as such an enormous number of patients are treated by public charities scarcely any are left for them to attend, and that the profession itself is thus threatened with starvation, which of course means extinction. Notwithstanding this, professors of Austrian universities continue to pride themselves on the number of their medical students. This, it is suggested, they should cease to do, and apply themselves entirely to improving the quality of the rising generation of medical men. Indeed, it is expected that the Government will direct its attention to the matter, and will devise means for lessening the terrible competition which is caused by the rush into an already much overstocked profession.

THE SALE OF POISONS.

THE amount of attention which has recently been devoted to poisons would almost appear to indicate a growing conviction that poisoning, accidental or otherwise, is on the increase. No work upon materia medica or therapeutics seems to satisfy the requirements of the author or the readers unless it has almost in tabular form a list of poisons and their antidotes. Special manuals of a few pages only are frequently issued upon the same subject, and special bags have been prepared, fitted up with all essentials for treating cases of poisoning with the least possible delay. Meanwhile other measures are attracting attention in America, and in some ways they seem to be in advance of our own precautions. A new Act has been passed in Massachusetts, widening the previous narrow circle of officially recognised poisons, which included only four substances—viz., arsenic, strychnine, corrosive sublimate, and prussic acid. Some thirty other preparations are now hemmed in with cautious restrictions, which entail the registration of the name and address of the buyer, and the use of a red label, bearing the name and address of the seller, together with the word "poison," and instructions indicating the recognised antidote. The *Boston Medical and Surgical Journal*, in commenting upon the Act, regrets that nothing is said with regard to the name of the poison being upon the label; but surely this is unnecessary. It should suffice for all but selective purposes to indicate the fact of poison and its mode of treatment if inadvertently taken. The name of the poison might in itself form a temptation to a rash suicidal impulse, which might otherwise be resisted if any doubt as to its nature and mode of operation were concealed beneath the red label. From another journal we learn that in New York it is now unlawful for the manufacturers of proprietary medicines to sell them unless the formula of their ingredients has been revealed to the State Board of Health. Legislative interference would seem to be almost inoperative in England; only last week in the course of an inquest it was stated that the deceased, a midwife, had for years been in the habit of inhaling large quantities of chloroform; and it is a well-known fact that most houses in the country have opium, chloroform, or ether for use on supposed emergencies.

THE DORSET COUNTY HOSPITAL.

No greater misfortune can befall a public charity than that a breach should arise between the lay body responsible for the management of its affairs and the honorary medical staff upon whom rests its reputation as a hospital. Happily such differences are of rare occurrence, which speaks well for the practice of mutual forbearance on occasions when questions arise that are capable of being regarded from the necessarily differing standpoints of the two bodies concerned. An excellent institution, the Dorset County Hospital, has just passed through such a crisis, which has kept the county in a state of ferment for some time past. Without entering into full details, we may say it appears that the dispute arose from the refusal of two members of the medical staff to recognise the claim of the matron to attend operations and ward visits in order that she might be informed of the instructions of the medical men and see that the nurses carried out those instructions. This, at any rate, is all that is ostensible; but we fail to understand how the matter was suffered to go the length it did, or why the compromise finally arrived at should have required a prolonged and active debate in a full court of governors. The resolution adopted, which took the form of an amendment to the motion of dismissal, was to the effect that the matron (who should be a trained nurse) should have free access to the operating

theatre and the wards, and accompany the medical officers when nurses are in attendance. "All's well that ends well," and we consider that with the proviso named no medical officer to a hospital need object to so rational a regulation.

THE EMPEROR OF BRAZIL.

FROM Milan a correspondent writes, May 14th:—"The complications in Don Pedro's condition proved even more serious than was at first surmised. When Professor Semmola appeared on the 7th, he found the febrile symptoms had masked a pleurisy of some days' standing, while there were cerebral phenomena which pointed to a deeper sort of mischief. On the evening of the 10th, the prostration was again so marked that, fearing its *sequelæ*, Professor Semmola summoned by telegraph Dr. Di Giovanni from Padua and Dr. Charcot from Paris, the latter of whom had some months ago been consulted by the Emperor. The Senator Dr. Bruno, a physician of great judgment and experience, was also called in. Meanwhile, the treatment approved at the last consultation was proceeded with until, on Dr. Charcot's arrival from Paris on the evening of the 12th, a decidedly favourable turn had declared itself. At the consultation which immediately took place, the eminent physicians of the Paduan and Parisian schools adhered in every particular to Professor Semmola's diagnosis and treatment."

SUCCESS OF COMPULSORY NOTIFICATION IN SALFORD.

IN reviewing the circumstances of the first quarter of the present year Dr. Tatham, medical officer of health for Salford, says that at no previous period during the five years in which compulsory notification has been in force in the borough has the efficiency of that system for the suppression of infectious disease been so unmistakably manifest. Small-pox was repeatedly imported into the district, twenty-six attacks having resulted. All were successfully removed to hospital, precautionary measures as to vaccination being also adopted. But a still stealthier disease has had to be encountered, for typhus made its reappearance in seven instances, six of them hailing from the well-known Regent-road quarter, which has contributed the bulk of the typhus cases for two years past. All these seven cases were also removed to the borough fever hospital. Some others have since occurred, and have doubtless been dealt with in the same way. The cases have occurred in rapid succession amongst victims so miserable in condition that, according to Dr. Tatham, this disease, as well as small-pox, would almost necessarily have been present in proportions which would have become practically unmanageable had it not been for the notification, and for the ensuing prompt removal to hospital which became possible. As it is, neither pestilence is making headway in the borough.

THE MONK BRETTON TRAGEDY.

WE would again draw attention to this case, as it seems to us, after careful consideration of the habits of the condemned man, that little doubt can be entertained that he was not in a fit state to be at large at the time he committed the murder. As we said before, drunkenness of itself is rather an aggravation than an extenuation of crime; but a man's intellect may be so blunted, and his moral sense so depraved by long indulgence in alcohol, that he can scarcely be judged by the same rules of law and common sense as an ordinary individual would be. That Burke committed the murder there can be no doubt from the evidence of the policeman who witnessed the fatal act. Still, we would urge for the consideration of the Home Secretary the facts—(1) that there was total absence of motive for the deed; (2) that the act was unpremeditated, or, as the law terms it, without "malice aforethought"; (3) that the firing of the shot was, to all intents and purposes, the impulsive act of a drunken lunatic; (4) that the letter written to his wife prior to the murder was an incoherent, rambling epistle, the product of an evidently diseased brain. It was a pity that steps were not taken to put the unfortunate man under restraint of some sort, for his drunken career was only too likely to end in some act of folly, and probably in crime.

THE DONDERS MEMORIAL FUND.

THE ceremony at Utrecht on May 28th to celebrate the seventieth birthday of Professor Donders and his consequent retirement from his professorship will comprise a formal presentation of the sum collected, together with the roll of subscribers, at 1.30 P.M., and also a public dinner at 5.30. After the ceremony of presentation the Professor will name the scientific purpose to which he proposes that the fund shall be applied. The complete list of subscribers from this country is to be seen in our advertising columns (page 53). Any subscriber may verify the amount of his subscription by applying to Mr. Brailey, 11, Old Burlington-street, where the audited list may be seen. The total amount collected here is £280 11*s.* 10*d.* Professor Humphry, Dr. Hughlings Jackson, Mr. Hutchinson, and Mr. Brailey have been invited to attend as delegates to represent the subscribers, and it is hoped that many others also may be able to attend, and by their presence do honour to Professor Donders.

AGOSTINO BERTANI.

HONOURS are falling thick on the name of the surgeon and sanitarian of the Italian Revolution. A tablet has just been unveiled to his memory on the façade of that house in Genoa where he planned and set in motion the most brilliant of all Garibaldi's expeditions—that of the "Mille" or "Thousand," which added the Two Sicilies to Italian unity. The following is a translation of the inscription: "Agostino Bertani, exile in Genoa from Lombardy, lived here nobly employed in the advancement of science and in the service of patriotism from 1853 to 1866. True to all the high-souled undertakings whence the new Italy took breath and form, in this house he endued with life and impulse, and from this house he launched, the memorable organising committee which aroused and inspired the armed Thousand on their path of prodigies, with Garibaldi for their leader, from Marsala to the Volturno. Sacred be the walls in which so great a history resides."

COCK'S GILLS AS A SOURCE OF SKIN GRAFTS.

SENOR F. ALTRAMIRANO mentions in a Mexican journal, *El Observador Médico*, a case in which he made some experiments in skin grafting on an obstinate ulcer left by a large carbuncle. More ordinary means having failed to cause it to heal, he applied three skin grafts taken from the patient himself. Of these only one took, and the man expressed so much repugnance to the proceeding that another source had to be found for subsequent grafts. A cock was selected, and fragments cut from his gills; these were split, divided into ten pieces, and the raw surfaces applied to a freshened portion of the ulcer. A carbolised dressing was then bandaged on, the whole being constantly moistened. On the third day, on the dressing being removed, all the ten fragments were found organically adherent. A number of new grafts were then applied, cut from the comb, the gills, and the skin of the back of a chicken. None of these were successful. The cock's gills were again resorted to, and four more fragments successfully grafted. A fresh se tof grafts

were prepared from this source; but all the cellular tissue was cut or scraped away, in some cases little but the epidermis being left, in others the edges being bevelled, so that the epidermis was in direct contact with the raw surface of the ulcer. This set of grafts proved very unsuccessful, so that Dr. Altramirano was led to the conclusion that no advantage is gained by applying the epidermic layer immediately in contact with the surface of the ulcer.

DENOMINATIONAL QUESTIONS AND THE HOSPITAL SUNDAY FUND.

WE are sorry to see our contemporary the *Christian World* giving insertion to letters raising denominational questions over the Hospital Sunday Fund collection. One of its correspondents writes to say that his church is not going to collect for the Hospital Sunday Fund because some of the hospitals helped to exclude nonconformist nurses. This question has been abundantly discussed in the Council of the Fund, to the satisfaction of such men as the Rev. Dr. Allon and Dr. Kennedy. It is obviously not within the duties of the Hospital Sunday Fund to criticise such details of administration in the hospitals. It is for the subscribers to these hospitals at annual meetings to do so. It is easy to stir strife and to make excuses for not giving to the Hospital Sunday Fund. But it would be higher Christianity and higher policy to overcome all narrowness in hospitals by more abundant collections.

KING'S COLLEGE LONDON.

MR. WILLIAM ROSE, M.B., B.S. Lond., F.R.C.S., has been appointed Professor of Surgery at King's College, in place of Mr. H. Smith, whose appointment has expired. Mr. Rose has also been appointed full surgeon in charge of the beds formerly under the care of his predecessor. This arrangement will take place at the close of the summer session. Mr. Rose has been surgeon at the Royal Free Hospital and on the surgical staff of King's College Hospital for many years, and his appointment to the chair of Surgery will be welcomed by his colleagues and the profession.

MYXŒDEMA.

AT the meeting of the Clinical Society, on the 25th inst., an abstract of the report of the committee appointed about four years ago to investigate the subject of myxœdema will be presented by Dr. Ord, chairman of the committee. The report is most exhaustive, and will shortly be published by the Society in separate form. The committee must be congratulated upon the completion of their labours, and Dr. Hadden, who, as secretary to the committee, has had the major part of the work to do, merits, and will doubtless receive, the warmest thanks of the Society.

PUBLIC MORTUARIES.

IT is surprising to learn that Liverpool is still without a proper public mortuary. A temporary erection, constructed partially of wood, has hitherto served the purpose, and the Liverpool Corporation appear to be deterred from the provision of a suitable building by the expectation that the Dock Board would contribute to its construction and undertake its maintenance. It is not creditable to a wealthy body having health duties of so much importance to attempt to limit its contribution to a small sum of £300, and we are glad to see that the public journals are commenting upon this conduct. It would be a well-deserved reproof if the Local Government Board were to exercise their powers under the Public Health Act, and require the Corporation to provide and fit up a proper place for the reception of dead bodies.

THE EMPEROR OF GERMANY.

THE latest reports from Germany represent the Emperor as enjoying more restful nights, with less pyrexia. This relief of the most distressing and urgent symptoms has been followed by a corresponding diminution of the exhaustion and weakness recently experienced. Professor Virchow has been requested to examine the secretions from the larynx, but his report has not yet been made, nor do we attach much importance to any such examination. If, as is most probable, the result of it is merely negative, it will really be of no special value. The improvement mentioned must be clearly distinguished from retrogression of the disease. The serious symptoms of a fortnight ago were not directly due to the disease of the larynx, but to an inflammatory complication. This complication has to a large extent subsided, but it must not be inferred therefrom that the growth in the larynx is less active or less destructive in its tendency.

'PANCREATIC DIABETES."

M. LANCEREAUX describes cases in which occur sudden loss of strength, great thirst, polyphagia, wasting, and loss of sexual desire, with at first diurnal and later also nocturnal polyuria. Phthisis developed at the apices of both lungs. Death occurred with a low axillary temperature. Nothing was found at the necropsy except atrophy of the pancreas; the pancreatic duct was narrowed in one part of its length, and completely obliterated at another; there were no calculi, and the organ weighed thirty-five grammes. Violent epigastric pain is remarked upon; the polyuria is nearly always related to the quantity of liquid ingested. Atrophy of the pancreas has been described as due to sclerosis, calculi, obliteration of the duct, and steatosis. Some observers have thought that destruction of the pancreas is perhaps a cause of diabetes. Several types of diabetes are recognised by Lancereaux: pancreatic or lean diabetes, with very rapid progress; fatty or constitutional diabetes, which is more commonly hereditary, has a slow course, and presents no pancreatic lesions; traumatic or nervous diabetes, due to shock of some kind, and generally slight and curable. We do not give these views because we endorse them, but because they are suggestive speculations.

THE FELLOWSHIP EXAMINATION.

THERE is an unusually large number of candidates for the next examination for the Fellowship of the Royal College of Surgeons on the 23rd, and the number (fifty-seven) is the highest that has hitherto been present at one examination. In consequence of this, the examination will extend over six days—viz., 23rd, 24th, 25th, 26th, 28th, and 29th, and the candidates have been given notice that they may be called upon to attend on any or all of those days, instead of as usual the three days following the written part of the examination.

HOSPITAL TAX IN ST. PETERSBURG.

THE St. Petersburg Town Council has resolved to ask Imperial sanction to a proposal enabling it to impose a poll-tax on the inhabitants for the support of the hospitals. The authorised limit of the tax is to be two roubles for a man, and a rouble and a half for a woman. A good many exemptions are made—e.g., members of the Imperial household and of the diplomatic corps, military men, sailors, persons under seventeen years of age, and some others (including, of course, paupers) are not to be taxed. All who pay the tax are to be entitled to free treatment in the hospitals. It would certainly appear that if nearly every person who is not from some official position or poverty already provided with medical attendance is obliged to contribute to the

hospital, and in so doing becomes entitled to treatment there, only a very limited amount of practice will be left for private practitioners.

THE MARSHALL HALL PRIZE.

A SPECIAL MEETING of the Royal Medical and Chirurgical Society will be held at 8.30 P.M. on Thursday, May 24th, when Dr. Walter Holbrook Gaskell, F.R.S., will read a paper on "The Relations between the Function, Structure, Origin, and Distribution of the Nerve-fibres which compose the Spinal and Cranial Nerves."

FOREIGN UNIVERSITY INTELLIGENCE.

Giessen.—A Professorship of Hygiene is about to be created, to which Dr. Löffler, of Berlin, is expected to be appointed.

Leipsic.—Dr. Curschmann, Director of the Medical Department of the General Hospital, Hamburg, has been appointed to the Professorship of Clinical Medicine vacant by the death of Professor E. L. Wagner.

Vienna.—Dr. Hans von Hebra has been selected for the late Professor Wertheim's post as *Primararzt* for Syphilis and Dermatology.

DEATHS OF EMINENT FOREIGN MEDICAL MEN.

THE deaths of the following eminent foreign medical men are announced:—Dr. MAX SCHNEIDER, Bavarian Court Councillor and Bath Physician in Reichenhall.—Dr. Michael Weissberg, Privy Councillor, of St. Petersburg.

THE Russian Surgical Pirogoff Society proposes to build a large institution in St. Petersburg, which may serve as the central meeting-place of all the various Medical Societies and a depôt for their valuable libraries. The Town Council, alive to the importance of this proposed building, has agreed to present the Society with a piece of ground which has been selected as suitable for the purpose. Unfortunately, however, it now turns out that the military authorities claim this piece of ground, and therefore dispute the right of the Town Council to give it away; so that it is as yet uncertain whether the Pirogoff Society will be able to begin their building, as they had hoped to do.

WE have received from Messrs. Mansell and Co., fine art publishers and photographers, copies of some mezzotint portraits of Sir Andrew Clark, Bart., Sir William Gull, Bart., Sir Joseph Lister, Bart., Sir Henry Thompson, and Sir Spencer Wells, Bart. The plates have been made by Mr. Robert S. Clouston, who has been afforded special facilities to obtain good and characteristic portraits, and the trial proofs have been approved and signed in each case. The plates will doubtless find a ready sale amongst those who are desirous of obtaining correct and striking likenesses of the above leaders of the profession.

AT a meeting of the annual committee of Convocation of the University of London, held on the 16th inst., it was decided to nominate a sub-committee to watch the proceedings of the Royal Commission on Higher Education in London, so as to secure the representation of the views of the graduates before the Commission. Drs. Baines and W. J. Collins were nominated as the medical members of the sub-committee.

MR. WALTER SPENCER, L.R.C.P., L.R.C.S., has been appointed Deputy Coroner for the Retford district of the county of Nottingham. The appointment has been confirmed by the Lord Chancellor.

CHOLERA LITERATURE will shortly be enriched by the elaborate report of Dr. Weiss, who for some months has been employed, at the instance of the Italian Government, in investigating the origin and course of the epidemic which prevailed in the provinces of Messina and Catania. Dr. Weiss, a highly competent sanitary inspector, will, it is understood, make preventive measures against a future cholera visitation a special feature of his report.

IN connexion with the incorporation of the Yorkshire College with the Victoria University, the College Council has created two new Professorships, in place of the former Lectureships, in Midwifery and Pathology in the medical department. Mr. Charles J. Wright has been appointed Professor of Midwifery, and Dr. Ernest H. Jacob Professor of Pathology and Morbid Histology.

THE Committee on Examinations in Medicine of the University of London, on the recommendation of the Special Committee recently appointed to consider the revision of the regulations for degrees in medicine, will recommend to the Senate various alterations chiefly affecting the Preliminary Scientific M.B. and Intermediate M.B. Examinations.

AT a general court of governors of Guy's Hospital held on the 9th inst., Mr. R. Clement Lucas, B.S., M.B., F.R.C.S., was appointed Surgeon to Guy's Hospital, in the place of Mr. Thomas Bryant, F.R.C.S., retiring from active hospital duties, and appointed Consulting Surgeon. Mr. W. Arbuthnot Lane, M.S., F.R.C.S., was at the same court appointed Assistant Surgeon to the hospital.

A HEALTH COMMISSION has been appointed to inquire into and report upon the sanitary condition of Melbourne and its suburbs, and to ascertain to what extent the existence of noxious trades and abattoirs injuriously affects the public health, and whether it is desirable to remove these trades and abattoirs from their present sites.

THE Croonian Lectures will be delivered by Dr. Donald Macalister at the Royal College of Physicians on June 14th, 19th, 21st, 26th, and 28th, at 5 P.M. Subject, "Antipyretics."

DR. MACDONALD is a candidate for the vacant coronership created by the division of East Middlesex into two districts.

Pharmacology and Therapeutics.

FURTHER OBSERVATIONS ON CREOLIN.

DR. J. NEUDÖRFER has just contributed some articles to the *Internationale Klinische Rundschau* (April 22nd and 29th) which throw some further light on the nature and properties of creolin, a substance that is rapidly coming into professional favour in Germany and some other continental countries. Its exact chemical composition is kept a secret by the manufacturers, the Creolin Company. An analysis by Dr. Bernard Fischer has been promised, but up to the present time it has not been published. Speaking roughly, creolin is prepared from coal-tar, the coal having to be, it is said, selected with great care. The benzol and carbolic acid are distilled off, and the residue treated with resin and caustic soda, a fluid resin soap being the result. One thing is quite certain: creolin does not contain the smallest trace of carbolic acid, for Millon's reagent, which will detect this if contained in solution in the proportion of 1 in 2,000,000, is unaffected by creolin. It must not, however, be assumed that it cannot therefore possess toxic properties, for coal-tar contains

several poisonous substances—as anilin, fuchsin, mauvin, safranin, &c. In order to test the question, Dr. Neudörfer injected creolin into the venous circulation of two dogs which were under the influence of curare, and on whom tracheotomy had been performed. Arrangements were also made for taking tracings of the blood pressure. A dose of 0·5 gramme of creolin per kilogramme of the dog's weight injected into the veins produced violent contortions and signs of pain, together with a high degree of salivation, the blood pressure sinking at first, and afterwards fluctuating greatly. In one case—that of a dog of 6 kilog., where the initial pressure had been 130 mm. of mercury—it fell immediately after the first injection of 1 gramme to 100 mm., and then rose to 180 mm., the curve once touching 210 mm.; there were during this time violent rigors. After these had ceased the pressure became 130 mm. again. A second gramme was then injected, which produced further rigors and fluctuations of the blood pressure; while the third injection caused a sudden fall of the pressure and the death of the animal. Immediately after death the heart and pericardium were found to be greatly distended, the liver and the kidneys, as well as the cardiac cavities, being remarkably full of blood. The spleen formed a curious exception to the general state of congestion, being lax, shrivelled, and pale. No explanation of this could be found. Passing to the therapeutic uses of creolin, Dr. Neudörfer states that it is, in his opinion, preferable as an antiseptic to carbolic acid, salicylic acid, iodoform, and corrosive sublimate. Mixed with water in the proportion of 1 to 5 per 1000, it is non-poisonous, and may be applied to wounds; it does not numb the hands of the surgeon or blunt instruments; and this mixture, if taken internally by mistake, does no harm. When applied to a suppurating surface the latter ceases to secrete pus, the dressings being merely stained with a greenish-yellow serum. Creolin has also a conservative action on the elements formed, the intercellular fluid being at the same time rendered more tenacious. This property, combined with the vaso-constrictor action, endues creolin with powerful styptic action. Creolin must be roughly classed as an "alterative," acting on the sensory, motor, and sympathetic nerves, and probably also on the nerve centres. It must be remembered that creolin is insoluble in, and therefore incompatible with, ether and alcohol, and so should not be prescribed with tinctures. The gauze impregnated with creolin which is generally sold is, according to the author, too strong, containing 5 to 10 per cent. of creolin. He considers 1 per cent. quite strong enough, but prefers to use a freshly prepared solution of 1 to 5 per 1000 for moistening his dressings. A powder may be made of creolin and asbestos (alumen plumosum) in the proportion of 5 to 100. Mixed with olive oil in the proportion of 5 to 10, creolin may be used for needles, catheters, trocars, &c. For operative sponges, Dr. Neudörfer recommends boiling for two hours in a 2 per cent. solution of creolin after each operation, the same solution being used to keep them in. Creolin may be used in various ways in gonorrhœa. Recently Dr. Neudörfer has been using hard bougies 10 centimetres in length, containing 1 to 3 centigrammes of creolin and 0·02 gramme of cocaine. In strangury and chordee injections of 10 cubic centimetres of creolin oil (1 in 3) are more efficacious than injections of narcotics. In large burns a weak mixture with oil and water (2 of creolin to 100 of linseed oil and 100 of water) is very useful; cocaine may of course be used simultaneously. A soap of creolin and saccharin has been prepared. Creolin has been given internally in phthisis, in cancer, and in locomotor ataxy. With regard to this, however, the only observations published are to the effect that it is quite harmless.

GINSENG.

A recent book upon "Life in Corea" directs attention to the commercial and possibly medicinal value of ginseng. Of the commercial value of this drug there can be no doubt, the quantity exported to China being very large, the revenue benefiting to the extent of 500,000 dollars annually. The plant indicated is the Panax ginseng or schinseng, not the Panax quinquefolium, or American ginseng, the root of which is one of the chief adulterations of senega. The former is cultivated in Corea under royal licence, and is in very high repute among the Chinese as a restorative. According to another authority, it is chiefly prized as a stimulant and aphrodisiac. The author of the book on Corea assumes that centuries of experience must be held to justify belief in the remedial properties of this drug. Further investigation may show that it has other and more valuable actions, even though the present tendency of medicine is to control the use of stimulants as rigidly as possible, and to avoid active interference in the other direction. The high price of the drug is likely to prevent its employment in this country.

CONDURANGO.

Professor Oser of Vienna, who has been making trials of condurango bark in carcinoma and other diseases of the stomach, finds that it has an excellent effect on the appetite and that it relieves over-sensitiveness. Some patients can take it for months without any unpleasant symptoms, while in others it soon sets up nausea, which cannot be prevented either by the simultaneous administration of correctives or by the employment of different preparations of the bark, such as the vinum or the liquor. Condurango appears to Professor Oser to deserve a place in our materia medica as a symptomatic remedy, but as to its exerting any specific action on malignant disease, he still holds to his old dictum that the only hope of cure in cancer of the stomach by means of drugs lies in the possibility of a mistaken diagnosis.

ROYAL COLLEGE OF PHYSICIANS.

AT a comitia of the College on the 14th inst., Sir A. Clark, President, in the chair, the following gentlemen were admitted to the Fellowship:—Thomas Cole, M.D.Lond.; Richard Caton, M.D.Edin.; F.G. Dawtrey Drewitt, M.D.Oxon.; W. B. Hadden, M.D.Lond.; Howard H. Tooth, M.B.Camb.; Chas. E. Beevor, M.D.Lond.; J. F. P. McConnell, M.D.Aberd.; W. Hale White, M.D.Lond. On the nomination of the Council, Dr. Herringham was appointed Examiner in Anatomy. On the motion of Dr. C. T. Williams, it was resolved to hold a conversazione in the month of June.

The following report of the Council on the Moxon Medal was read and adopted:—"1. That the memorial consist of a gold medal, of the value of £30, to be awarded every third year to the person who shall be deemed to have especially distinguished himself by observation and research in clinical medicine. 2. That the award be not restricted to British subjects. 3. That the award be made on the recommendation of the President and Council (who may, if they see fit, call in the aid of assessors), subject to the approval of the College. 4. That, in making the award, the College should always have regard to discovery and originality in research, rather than general personal reputation. 5. That the medal be presented by the President of the College, immediately after the Harveian Oration; and that, in the absence of the medallist, the medal be given into the hands of the Registrar, who shall forward it to its destination. 6. That the medal shall present on the *obverse* the portrait of the late Dr. Moxon, with his name and the dates 1836—1886; and on the *reverse* the portico of the Royal College of Physicians with the inscription *ob artem medicam studiis et experimentis auctam;* and further, that the name of the medallist, in his native language, with the date of the award, be engraved on the rim of the medal."

A report from the committee appointed to consider the fittings &c. of the new building on the Embankment was read and adopted. The Registrar gave notice that, at the next Comitia, he would move that a special committee consider the subject of the management of this building.

LEEDS DIVISION, VOLUNTEER MEDICAL STAFF CORPS. The enrolment of members of this corps commenced on the 10th inst. For about two years the movement has been going on as an Ambulance Association of the Yorkshire College, and this year, on the 1st of April, it was formally established as the 2nd Company of the 4th Division of the Volunteer Medical Staff Corps, it being the second company in the northern district which has been started.

IN the Chancery Division of the High Court of Justice on the 12th inst., Mr. Justice Kay sanctioned a compromise by which two-thirds of the property of the late Mr. John Oldenberg went to charities and the remaining third to the next of kin of the testator. Amongst the charities which are benefited are the London Hospital, University College Hospital, and St. George's Hospital.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Lewes Urban District.—Mr. Braden explains in his report that a material improvement as regards the sewerage of Lewes is now about to be effected, and we hope that, as soon as it is completed, the sanitary authority will insist on all houses lying within a hundred feet of the sewers being connected with them. In this way alone will the cesspools, with which part of Lewes has long been honeycombed, be ultimately got rid of. He speaks more hopefully, we fear, than many others could as to the river being adequate to oxidise whatever sewage may reach it from such a town as Lewes, and we imagine that his opinion would hardly be endorsed by the Rivers Pollution Commission. Still, it is a tidal river, and much will doubtless be regularly got rid of in so far as Lewes in concerned. Phthisis, we are glad to learn, has been steadily diminishing as a cause of death for some years past. The improvement, it is suggested, may be due to the very dry seasons we have recently experienced. As to this connexion of phthisis with wetness, it is well known that Lewes lies in part at a high elevation on the chalk, and in part down in the river valley, and it would be interesting to learn the proportion for a long series of years of phthisis deaths to the populations living respectively in the valley and at a given elevation above high-water mark. The death-rate for 1887 was about at its average—namely, 16·6 per 1000 living.

Hexham Rural District.—Dr. M[illegible]gan's reports in this district are always instructive, and the present one, whilst it is largely made up of information of local rather than of general interest, is yet one which abounds in evidence of a carefully sustained sanitary supervision. An important correspondence has taken place as to the importation into this district of manure from the city of Newcastle, the manure being of such a character as to cause considerable nuisance, even if it be not, as is locally contended, an actual cause of disease. Certainly privy contents when transported into an adjoining district are likely to be as prejudicial as if the stuff were allowed to accumulate in the city, and it is certain that some measures are needed in the matter. The model bye-laws are referred to in one part of the report, and if those are being adopted which deal with the prevention of nuisances, they should be made sufficiently stringent to cover the evils complained of. The general death-rate of the district during 1887 was 16·1 per 1000 living.

Kendal Urban District.—Mr. C. E. Paget accompanies his report on the health of Kendal during 1887 by some carefully prepared tables and other information as to the meaning of vital statistics for that and preceding periods. He rightly attaches much importance to regular and systematic inspection of his district, and amongst the good work it has resulted in he refers to the abatement of ever-recurring nuisance from ashpits by covering them in and so protecting them from alternate wet and sun. But there remain privy ashpits, which can only be effectually dealt with by their abolition, earth-closets or water-closets being substituted. The occurrences of infectious disease are dealt with in detail, and it is shown how the borough sanatorium increases in usefulness. Evidently some steady sanitary work is going on in Kendal.

Wavertree Urban District.—Dr. H. Harvey explains that the excess of deaths, which in 1887 represented a rate of 19·0 per 1000, was in the main due to an epidemic of measles, to increased mortality from lung affections, and to an increase of deaths amongst infants; the latter being an indication of the long-continued scarcity of work, with its attendant increase of poverty. Twenty cases of enteric fever occurred, and although certain apparent causes were investigated, no sufficient explanation of them seems to have been forthcoming. Much the same may be said of the 23 cases of diphtheria, a disease which it is often difficult to trace to its source. The current sanitary work of the district is maintained, but unfortunately no agreement has as yet been come to as to the provision of a hospital for infectious diseases, notwithstanding that the community continues from time to time to incur considerable risk in consequence.

Jarrow Urban District.—The annual death-rate of Jarrow for 1887 was 19·8 per 1000, this being 1·5 under the mean rate for the last decade. In 1886 the number of cases of infectious diseases notified was 140; last year it was 765, the increase being mainly due to measles, which has recently been experimentally added to the list of notifiable diseases for a period of five years. Speaking of notification generally, Dr. Campbell Munro says that during the nine years of its operation the zymotic rate has fallen 1·2 per 1000, and that the main saving of life effected in the borough has been under that heading; indeed, he maintains that it approaches, as nearly as is possible in the case of sanitary statistics, to mathematical demonstration that the improvement is almost entirely due to the operation of the system of compulsory notification of infectious diseases.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns 5696 births and 3174 deaths were registered during the week ending May 12th. The annual rate of mortality in these towns, which had declined in the four preceding weeks from 21·9 to 18·7, further fell last week to 17·6, a lower rate than has prevailed in any week since the beginning of October last. During the first six weeks of the current quarter the death-rate in these towns averaged 19·5 per 1000, and was 2·9 below the mean rate in the corresponding periods of the ten years 1878-87. The lowest rates in these towns last week were 12·5 in Cardiff, 14·1 in Derby, 14·3 in Brighton, and 14·8 in Sheffield. The rates in the other towns ranged upwards to 22·8 in Blackburn, 23·6 in Wolverhampton, 24·7 in Halifax, and 26·7 in Bolton. The deaths referred to the principal zymotic diseases, which had been 364, 328, and 329 in the previous three weeks, further declined last week to 287; they included 109 from whooping-cough, 45 from scarlet fever, 40 from measles, 32 from diarrhœa, 29 from "fever" (principally enteric), 26 from diphtheria, and only 6 from small-pox. The deaths from these zymotic diseases, caused the lowest rates last week in Sunderland and Portsmouth, and the highest rates in Wolverhampton, Blackburn, and Salford. The greatest mortality from whooping-cough occurred in Derby, Manchester, and Salford; from scarlet fever in Huddersfield and Blackburn; from measles in Nottingham and Bradford; and from "fever" in Leicester and Nottingham. The 26 deaths from diphtheria included 15 in London, 2 in Liverpool, and 2 in Norwich. Small-pox caused 3 deaths in Sheffield, 1 in Manchester, 1 in Preston, and 1 in Leeds, but not one in any of the twenty-three other large provincial towns or in London. The Metropolitan Asylum Hospitals contained 11 small-pox patients at the end of last week, against 21 and 16 on the preceding two Saturdays; the Highgate Small-pox Hospital contained 1 patient at the end of the week. The number of scarlet fever patients in the Metropolitan Asylum Hospitals and in the London Fever Hospital was 979 on Saturday last, against numbers declining steadily in the preceding twenty-three weeks from 2764 to 990; the 96 cases admitted to these hospitals during the week showed an increase of 19 upon the number in the previous week. The deaths referred to diseases of the respiratory organs in London, which had declined in the preceding four weeks from 444 to 287, further fell last week to 260, and were 74 below the corrected average. The causes of 63, or 2·0 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Leeds, Sunderland, Portsmouth, and in five other smaller towns; the largest proportions of uncertified deaths were registered in Hull, Salford, and Halifax.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 21·2, 21·0, and 19·5 per 1000 in the preceding three weeks, rose again to 21·1 in the week ending May 12th; this rate exceeded by 3·5 the mean rate during the same week in the twenty-eight large English towns. The rates in the Scotch towns ranged from 14·7 and 16·5 in Leith and Dundee, to 21·2 in Edinburgh and 24·3 in Glasgow. The 534 deaths in the eight towns showed an increase of 41

upon the number returned in the previous week; they included 19 which were referred to whooping-cough, 11 to measles, 3 to scarlet fever, 3 to "fever" (typhus, enteric, or ill-defined), 1 to diphtheria, and not one to small-pox. Thus, 40 deaths resulted from these principal zymotic diseases, against 62, 49, and 35 in the preceding three weeks. These 40 deaths were equal to an annual rate of 1·6 per 1000, which corresponded with the mean rate last week from the same diseases in the twenty-eight English towns. The fatal cases of whooping-cough, which had declined in the preceding five weeks from 26 to 11, rose again last week to 19, of which 15 occurred in Glasgow and 2 in Edinburgh. The 11 deaths from measles showed an increase of 5 upon the number in the previous week, and included 10 in Glasgow. The deaths referred to diphtheria, which had been 11, 5, and 9 in the preceding three weeks, declined last week to 1. The fatal cases of scarlet fever, "fever," and diarrhœa corresponded with the numbers in the previous week. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had declined in the preceding six weeks from 144 to 106, further fell last week to 105, and were 15 below the number in the corresponding week of last year. The causes of 67, or more than 12 per cent., of the deaths registered in the eight towns during the week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been 31·5 and 21·7 per 1000 in the preceding two weeks, rose again to 23·1 in the week ending May 12th. During the first six weeks of the current quarter the death-rate in the city averaged 26·1 per 1000, the mean rate during the same period being 18·4 in London and 20·6 in Edinburgh. The 156 deaths in Dublin showed an increase of 9 upon the number in the previous week; they included 9 which were referred to whooping-cough, 4 to scarlet fever, 2 to "fever," 1 to measles, 1 to diarrhœa, and not one either to small-pox or diphtheria; in all, 17 deaths resulted from these principal zymotic diseases, against 21 and 12 in the preceding two weeks. The annual death-rate from these zymotic diseases was equal to 2·5 per 1000, the rate from the same diseases being 1·6 in London and 1·0 in Edinburgh. The fatal cases of whooping-cough, which had been 5 and 7 in the previous two weeks, further rose last week to 9, and exceeded the number returned in any recent week. The deaths from scarlet fever also exceeded the mean number in recent weeks. The fatal cases of the other zymotic diseases scarcely differed from recent weekly numbers. The deaths of infants showed an increase, while those of elderly persons had declined, in comparison with the numbers in the previous week. Four inquest cases and 4 deaths from violence were registered; and 43, or more than a fourth, of the deaths occurred in public institutions. The causes of 22, or more than 14 per cent., of the deaths in the city were not certified.

INFANT MORTALITY IN BERMUDA.

The report of the Registrar-General of Bermuda (Mr. Cavendish Boyle) for 1887 has recently been issued, which shows a death-rate at all ages equal to 20·4 per 1000 of the estimated population (15,347), which compares favourably with the death-rate in many of the neighbouring West Indian islands. Mr. Boyle comments on the fact that the deaths of children aged under one year constituted in 1887, although showing a decline from the numbers in previous years, no less than 33 per cent. of the deaths at all ages in the colony. In order, however, to estimate the true import of this percentage, it would be necessary to know the proportion of infants in the living population, which is not stated. From facts given in the report, however, it appears that during the six years 1882-87 the deaths of infants under one year of age were equal to 227 per 1000 of the registered births, the proportion being 186 among the white and 242 among the coloured population. These figures stand out in startling contrast with the rate of infant mortality last year in Trinidad and Tobago, as recorded in a return to which we recently called attention, and where the rates did not exceed 158 and 97 per 1000 respectively of the registered births. The subject of infant mortality in Bermuda evidently needs full investigation, more especially as the death-rate at all ages in the colony was last year below that which prevailed either in Trinidad or Tobago.

Correspondence.

"Audi alteram partem."

"ON CYCLIC (OR PHYSIOLOGICAL) ALBUMINURIA."

To the Editors of THE LANCET.

SIRS,—I should not have felt called upon to make any comment upon the paper by Dr. Robert Barnes under the above ambiguous heading but for the fact that in it he refers to me personally. He asserts that I and others "have overlooked the crucial and conclusive evidence in proof of the proposition that albuminuria may exist independently of any structural changes in the kidney which is found in the study of gestation." In reply to this charge of oversight, I beg to say that if Dr. Barnes had done me the honour to refer to my volume of "Medical Lectures and Essays," which was reviewed in THE LANCET on the 24th and 31st of March, he would have seen that I have not neglected the study of puerperal albuminuria. In section 8 of the chapter on Bright's Disease (p. 753) I state that, having seen a considerable number of cases of albuminuria associated with pregnancy, I find that they may be arranged in four distinct classes:—

1. Women known to be suffering from chronic Bright's disease may become pregnant, and some of them may pass through the different stages of pregnancy and parturition without serious complication.

2. In the advanced stages of pregnancy, especially in primiparæ, the urine sometimes becomes scanty and highly albuminous. With this there is more or less general œdema, headache, and not rarely convulsions. After delivery the urine soon becomes copious, and within two or three days it may be found quite free from albumen. In this class of cases the pressure of the gravid uterus on the vena cava affords the most probable explanation of the symptoms.

3. In a third class of cases the albuminuria may come on at an early period of pregnancy, and evidence of acute desquamative nephritis is afforded by the presence of epithelial and blood casts in the urine.

4. There is yet a fourth class of cases in which albuminuria appears for the first time *soon after delivery*, and is best explained by the theory of septic absorption from the interior of the uterus. In these cases, too, we find epithelial casts and other evidence of acute nephritis.

It is obviously of the highest practical importance, with reference especially to prognosis and treatment, that the four classes of cases of puerperal albuminuria to which I have here briefly referred should be distinguished from each other. In the third and fourth class of cases the disease, although associated with acute inflammatory changes in the kidney, may end in complete recovery, or it may pass on to the stage of chronic and incurable degeneration of the kidney. Dr. Barnes, however, appears to assume that "the complete recovery of the kidney excludes the theory of inflammation." It would have gone hard with vast numbers of my patients if complete recovery from acute desquamative nephritis were not the rule rather than the exception.

I once more repeat my protest against the term "physiological albuminuria." The most delicate test finds no albumen in unquestionably normal urine; the term "physiological" is therefore inappropriate and misleading. The fact that albuminuria may occur as a transient condition unattended by symptoms of disordered health, and apart from evidence of structural changes in the kidney, does not make the condition physiological. We know that pulmonary hæmorrhage may occur unassociated with evidence of structural disease of the lungs and heart, yet no one would make light of a persistent or recurring hæmorrhage of this kind and speak of it as a "physiological hæmoptysis." Such a term, however, would not, in my opinion, be more inappropriate than the analogous expression, "physiological albuminuria." To avoid needless repetition, I may refer those who are interested in the question of so-called "cyclical albuminuria" to a short paper of mine on that subject in THE LANCET of Jan. 7th last.

I am, Sirs, yours faithfully,

Savile-row, May 14th, 1888. GEORGE JOHNSON.

PUERPERAL ALBUMINURIA.

To the Editors of THE LANCET.

SIRS,—Dr. Barnes, in your issue of May 12th, has suggested that a study of the phenomena of gestation may throw light upon certain pathological conditions. As regards the subject of his article, I think the converse is also true. In THE LANCET for 1886, I pointed out various similarities between puerperal albuminuria and some forms of functional albuminuria, and suggested that the puerperal disorder was due primarily to a blood change and was independent of organic renal disease. There is one form of functional albuminuria of which the pathology is fairly well known, and if a comparison is made between cases of this disorder and others of puerperal albuminuria the correct pathology of the latter will be clear.

Patients not unfrequently present themselves to the physician complaining of a complexity of symptoms, of which the chief are languor, mental torpor, sleeplessness and yet drowsiness, and a throbbing headache often felt at the back of the head. The pulse is found to be one of high arterial tension, and if the patient is beyond middle age some enlargement of the heart may be discovered. With these conditions the urine may or may not contain albumen. The history will often show that the patient has been in the habit of eating and drinking too much or of taking insufficient exercise, although in other cases none of these causes are found, and it would then appear that there is some constitutional tendency to the condition. The pathology of such cases is the following: From excessive imports or diminished exports the blood is loaded with impurities causing the high arterial tension and the enlargement of the heart, which may be due to dilatation or to hypertrophy according to the duration of the disorder. The kidneys, in their efforts to get rid of the blood impurities, are liable to become overworked and irritated, and albuminuria ensues. The symptoms are relieved by a dose of calomel, followed by a saline purge; the high arterial tension is diminished, and the albuminuria vanishes at once, the explanation being that the purge has removed the blood poison from the system, and with it the source of irritation of the kidneys. The albuminuria is clearly functional, and its features are strikingly similar to those of puerperal albuminuria.

In pregnancy we find, as a rule, high arterial tension and some enlargement of the heart, both conditions being the more marked the later the period of gestation. The vascular system of the mother alone has to convey the excrementitious matters of both mother and child. The blood is therefore impure, as in the functional albuminurias described above, and in its circulation causes high arterial tension and cardiac strain. The kidneys endeavour to remove the impurities, and in most cases are successful. In other cases, whether from excessive amount of impurities or from excessive vulnerability of the kidneys, these organs are irritated by their efforts, and albuminuria ensues.

But the analogy between the two conditions mentioned does not cease here. In the one case the dose of calomel removes some of the blood impurities, and with them the albuminuria and other symptoms. In the albuminuria of pregnancy parturition plays the same *rôle* by removing the child, and with it the extra source of blood impurity; consequently the high arterial tension and albuminuria at once disappear. An albuminuria consequent upon organic disease of the kidneys could not disappear so quickly, never to return, and we are forced to believe that the pathology in the two classes of cases is the same, and that the albuminuria of pregnancy is primarily functional. This view is supported by the observations of Depaul, mentioned by Dr. Barnes. It is nevertheless true that in post-mortem examinations upon cases of puerperal albuminuria organic disease of the kidneys has been found. In very few instances has venous congestion been seen. Usually, if changes are present, they are described as those of a more or less intense parenchymatous nephritis. I have elsewhere shown that such changes are found in connexion with the albuminuria of diabetic coma, where they are probably produced by an attempt on the part of the kidneys to remove bodies of the acetone group from the system. It would be interesting to know whether Weigert's coagulation necrosis, which is such a marked appearance in the acetonæmic kidney, and would indicate intense irritation, is also present in the kidney of puerperal albuminuria. On this point I have no information to give, as I have not yet had an opportunity of examining the kidney in such a condition. The finding of organic change of any kind would not invalidate the view that puerperal albuminuria is usually functional.

The degree of puerperal blood impurity varies, and may in one case produce merely high arterial tension; in another also a slight albuminuria; in a third, assisted possibly by an unusual vulnerability of the kidney, a severe albuminuria and organic renal change. It will be remembered that the functional albuminurias referred to above, not of puerperal origin, do sometimes lapse into organic disease. Here, however, the irritation being more persistent, a granular kidney is produced instead of a more acute nephritis.

I am, Sirs, yours obediently,

ROBERT MAGUIRE, M.D., M.R.C.P.,

Seymour-street, Portman-square, W., May 12th, 1888.

"PHTHISIS A DISEASE OF THE NIGHT."

To the Editors of THE LANCET.

SIRS,—I have to thank Dr. Richardson for his kindly criticism, but I think that the valuable facts he adduces from Dr. Buchanan's report only serve to corroborate my theories. I learn from them that the effects of cold air breathed at night are greatly lessened when the amount of watery vapour in the air is permanently reduced. Dr. Huggard of Davos, too, informs me that the atmosphere there is singularly free from watery vapour, and on that account the cold, which is intense, is hardly noticeable. It is a fair question to ask, in view of Dr. Ransom's very able and interesting address—What is cold? I suppose that it is a mere negation, not an entity. It is certain, I think, that these bodies of ours do resent in many and varied ways the abstraction of even small amounts of the heat which they must maintain, or die. It seems almost a pity that cold cannot be looked upon as an entity, for it is certain that the effect of the want of heat or of its abstraction differs greatly under varying circumstances. We speak of cold and damp as if cold were one thing and damp another. In point of fact, cold is simply want of heat, a mere nonentity, while damp (vapour of water) is a very distinct entity. Cold affords (if I have read Dr. Ransom's most valuable paper aright) a good example of an "unfixed term." Cold is, however, too handy a term to drop before I have said that its effects seem to vary vastly according to—(1) its degree or intenseness, its kind, its mode of application, and to the duration of the exposure to it, &c.; (2) to the state and condition of its subject in whole or in part, and also to the states and conditions in whole or in part of other living organisms with which it may be brought in contact—men, beasts, bacilli, miasmata, &c.

Space will not allow me to say more. To repeat the main points of my paper, which might have been headed "No Irritation, no Phthisis," only that I wished to emphasise my opinion that in the vast majority of cases the chief mischief is done at night: 1. *Irritation* (another unfixed term) is the *cause* of phthisis. 2. Cold air breathed at night is the commonest form of *irritation* causing phthisis. 3. Therefore a supply of pure warm air at night would stamp out phthisis. Phthisis is undoubtedly a disease of the so-called temperate climates. There must be some form of *irritation* common to all to cause the vast majority of cases. Particular forms of *irritation*, such as grit, coal-dust, &c., do not cause a different disease. It is an established fact that persons who would otherwise inevitably succumb to the disease can ward it off if only they have the means and will follow out sound directions as to climate and regimen.

Now, I believe, and write to say so, that if only we could render the populations of temperate climates independent of climate by night by supplying them with pure warm air at night, then phthisis would be as unknown as it is in some parts of Upper Egypt, or, to take the other extreme, in Iceland. A man awake can look after himself, asleep he cannot. During our waking hours it seems clear to me that our well-known five senses, together with the sixth or muscular sense, combine so as to form, as it were, a seventh or combined sense, which acts so as to bring about or produce the state or condition which may be termed "consciousness." This enables us to steer our sentient bodies clear of the thousand surrounding points of contact which would other-

wise cause injury. I conceive that this seventh or combined sense stands in the same relationship to consciousness as impulse does to reason. Consciousness *per se* would often be too late to be of service. But this seventh sense, once set in motion, awakens consciousness, which can then, if necessary, call the will to its aid. It would be easy to enlarge upon this, and my theory would not be denied with regard to merely mechanical movements and rigid points of contact. But this protective influence of the combined senses does not stop here; it is constantly called into play instinctively when other than mechanical injury is threatened. Who does not hold his breath involuntarily when he smells a stench? I do not know if it has before been definitely stated in so many words, but it is a fact that *respiration* is the only vital function that is under the immediate command of the will. It is in itself a striking fact, and the effects following are no less striking. By the exercise of this power of the will over the respiratory acts the blood pressure can be raised or lowered at will. Who does not know that a few prolonged inspirations will induce such a condition of faintness that a small surgical operation can be performed without pain? On the other hand, by restraining the respiration, as in the act of sipping a glassful of water (*vide* Lauder Brunton), the blood pressure is very notably increased. Who can doubt that this is a means of protection against a thousand evil influences that no single one of the five or six senses could detect, but of which we are made more or less conscious through their combined action? For my part, I know that when I have to visit an infectious case I breathe slowly and carefully, and waste as little breath as I can till I am in fresh air again. Now, during sleep the will and all the senses are in abeyance, and the poor lungs are left to take care of themselves as best they may.

I am, Sirs, yours obediently,

R. J. SHEPHERD, M.D.

St. Olave's Union Infirmary, May 8th, 1888.

P.S.—Mr. G. Fleming, F.R.C.V.S., in his letter on "Bovine and Human Tuberculosis" (See THE LANCET, April 7th, 1888.), mentions the prevalence of tuberculosis amongst the choicest breeds of cattle. It would be interesting to know how these cattle are housed, and if over-ventilation, especially at night, has robbed them of the necessary amount of warmth.

THE STOMACH-PUMP SUPERSEDED.

To the Editors of THE LANCET.

SIRS,—The recent correspondence as to the use of covered funnels in feeding by the stomach tube leads me to give greater publicity to a far better contrivance, which I devised many years ago, and constantly use here. An ordinary twenty-ounce bottle, perforated near the bottom by a small tap for the admission of air, and a long stomach tube bearing a cork which fits the mouth of the bottle, constitute the whole apparatus. The food being mixed in the bottle, the tube is introduced, the cork placed in the mouth of the bottle, the bottle inverted and raised, and the air-tap opened, when the food passes quickly into the stomach in a continuous stream. Great injecting force can be at once applied if required by *blowing* through the air-tap, to which a small rubber tube is attached for this purpose. For simplicity, cleanliness, efficiency, and perfect inspection this plan leaves nothing to be desired, and solid nourishment can be thus given in many forms, as there is no tap to obstruct its passage, and as the food can be kept in agitation within the bottle during administration. No one who has used this contrivance will wish for any other. It is equally available for emptying the stomach by lowering the bottle and establishing a syphon action by suction. Messrs. Hilliard and Sons, Glasgow, supply the apparatus, which is represented in the engraving.—I am, Sirs, yours truly,

D. YELLOWLEES, M.D.

Royal Asylum, Gartnavel, Glasgow, May 12th, 1888.

SIR WALTER SCOTT AND HYDATID DISEASE.

To the Editors of THE LANCET.

SIRS,—The indications in "Lockhart" that Scott was a victim to hydatid disease seem to have been overlooked. His constant intimacy with dogs is well known, but it was not till many years after his death that dogs were known to be the source of hydatids. The extracts are from the first edition, in seven volumes, but the dates as given will assist verification. I give them in their natural order, with the exception of the post-mortem examination, to be found in a foot-note towards the end of the work.

Vol. vii., p. 394: "Abbotsford, Sept. 23rd, 1832.—This forenoon, in presence of Dr. Adolphus Ross from Edinburgh, and my father, I proceeded to examine the head of Sir Walter Scott. On removing the upper part of the cranium, the vessels on the surface of the brain appeared slightly turgid, and on cutting into the brain the cineritious substance was found of a darker hue than natural, and a greater than usual quantity of serum in the ventricles. Excepting these appearances, the right hemisphere seemed in a healthy state, but in the left, in the choroid plexus, three distinct though small hydatids were found, and on reaching the corpus striatum it was discovered diseased, a considerable portion of it being in a state of ramollissement. The bloodvessels were in a healthy state.—*J. B. Clarkson.*"

In regard to the extracts which follow, I have the remark to make that there is no allusion to gall-stone disease in the whole work.

Vol. iv., p. 57: "Edin., March 20th, 1817.—I had been plagued all through this winter with cramps in my stomach, which I endured as a man of mould might. . . . On the 5th I had a most violent attack, which broke up a small party at my house, and sent me to bed roaring like a bull calf. . . . At length the symptoms became inflammatory, and dangerously so, the seat being the diaphragm."

Vol. iv., p. 231: "It had been Scott's purpose to spend the Easter vacation (1819) in London, and receive his baronetcy; but this was prevented by the serious recurrence of the malady, which so much alarmed his friends in the early part of the year 1817, and which had continued ever since to torment him at intervals."

Vol. iv., p. 237 (to Southey, April 4th, 1819): "I have gone through a cruel succession of spasms and sickness, which have terminated in a special fit of the jaundice. ..... If I had not the strength of a team of horses I could never have fought through it."

Vol. iv., p. 244 (to the Duke of Buccleuch, April 15th, 1819): "My whole left leg was covered with swelling and inflammation; ..... my right leg escaped better." About this time Lockhart visited him at Abbotsford.

Vol. iv., p. 259: "He had lost a great deal of flesh; his clothes hung loose about him; his countenance was meagre, haggard, and of the deadliest yellow of the jaundice; and his hair, which a few weeks before had been but slightly sprinkled with grey, was now almost literally snow-white." These painful attacks recurred for months. At last they left him, and for some years he enjoyed good health.

Vol. v., p. 320 (1824): "His woods were now in such a state of progress, that his usual exercise out of doors was thinning them. He was an expert as well as powerful wielder of the axe, and competed with his ablest subalterns as to the paucity of blows by which a tree could be brought down, ... and if he had taken, as he every now and then did, a whole day with them, they were sure to be invited home to Abbotsford to sup gaily at Tom Purdie's."

As the general symptoms of chronic brain diseases are very much alike, it is hardly necessary to quote passages to show the course of the final illness, which lasted from February, 1830, till September, 1832. The convulsive attacks called apoplectic would now be probably called epileptic. For example:—

Vol. vii., p. 238: "Towards the end of November, Sir Walter had another slight touch of apoplexy. He recovered himself without assistance." Scott says in reference to this attack (p. 242), "I had a slight vertigo when going to bed, and fell down in my dressing-room, though but for one instant."

There seems to be no evidence that any other members of Scott's household suffered from hydatid disease; but it looks suspicious that so many deaths happened in the family about the same time. Lady Scott died in 1826,

"asthmatic complaints terminating in hydropsy." Miss Anne Scott, in 1833: "brain fever," preceded by occasional fits for a year or two. Mrs. Lockhart, in 1837, "after a long illness." I am, Sirs, yours truly,

Chobham, April, 1888. JOHN HOPE, M.D.

ELECTRIC ILLUMINATION OF THE BLADDER.

To the Editors of THE LANCET.

SIRS,—Dr. Nitze, in your issue of May 12th, states his belief that I have given unfair prominence to Mr. Leiter in the history of electric endoscopy. Dr. Nitze is greatly mistaken. I cannot believe that he has seen an abstract of my lectures upon the subject (delivered in January and February last), which was in print prior to Dr. Nitze's first appearance in the English medical press (THE LANCET, April 21st, 1888). I have there described the method as "The Nitze Method." I have, moreover, drawn especial attention to the value of his work, and have referred to him as "the able introducer of this brilliant innovation." I endeavoured thus to give honour where honour was due. I must now decline any further correspondence with Dr. Nitze on the subject.

I am, Sirs, yours faithfully,

Old Burlington-st., May 12th, 1888. E. HURRY FENWICK.

OSTEO-PLASTIC RESECTION OF THE FOOT BY THE METHOD OF MIKULICZ.

To the Editors of THE LANCET.

SIRS,—I was very much interested in reading the paper by Sir William Mac Cormac in your issue of May 5th. The case reported reminds me of one which I published in your journal of July 10th, 1886 (vol. ii., p. 71), in which I removed os calcis, astragalus, and both malleoli by a posterior median and horseshoe incision, without attempting, however, to obtain ankylosis, and yet getting what was very much better—a perfectly movable false joint. The operation was performed in the year 1882, and I showed the case before the Leeds and West Riding Medico-Chirurgical Society in 1886. My patient at the present time, six years after the operation, can walk without a limp and is in perfect health. The operation, as far as I was concerned, was a perfectly original one, and was really brought about by the exigencies of the case. I have, however, always felt that if I again met with a similar case I should not hesitate to do the same operation. Of course I would not venture for one moment to criticise the operation reported by Sir William Mac Cormac, but I have never heard of a similar operation to my own being performed, and should be glad to know if, generally speaking, there can be any sound objection to my method of operating in cases requiring resection of the foot. I will only add that I shall be pleased to forward to yourselves or to Sir William Mac Cormac the specimen of bone which I removed. I remain, Sirs, yours obediently,

Batley, Yorkshire, May 10th, 1888. ALFRED SWANN, M.D.

"ANOREXIA NERVOSA."

To the Editors of THE LANCET.

SIRS,—The following case may be of interest as an example of this newly recognised condition.

The patient was a weakly, emaciated lady, capable of doing a fair amount of work when not interfered with, but the slightest interference was quite sufficient to disturb her normal equilibrium. It was then that certain curious phenomena manifested themselves. They usually commenced with intense headache and a peculiar cold feeling in the region of the heart, which ultimately extended itself throughout the body, leaving the extremities very pale in colour. This was especially so as regards the lobes of the ears, which were almost as white as chalk. These sensations were followed by a constant dribbling of urine, often sufficient to saturate two dozen napkins daily. Towards the close it became more or less limpid, and was usually accompanied by a sharp attack of diarrhœa, leaving the patient well until the next disturbance, which never occurred without some assignable cause. There was a great distaste for food, the patient going for days without taking anything beyond hot water. Amenorrhœa was also present. This lady some time ago went to live in a farmer's house some miles away, was *forced* to take "plenty of milk and fresh eggs," and came home very much improved. She is now having the massage treatment, and is improving daily. Since going away there has been no return of the symptoms alluded to. I am, Sirs, yours faithfully,

Liverpool, May 14th, 1888. T. GERALD GARRY, M.D.

LUNACY CERTIFICATES.

To the Editors of THE LANCET.

SIRS,—I think that medical men have reason to be grateful to you for the powerful manner in which you put their case in this matter. I think it is eminently desirable that they should one and all refuse to sign any more of these certificates in the existing state of the law. It is monstrous that a man should be mulcted in hundreds of pounds for signing a lunacy certificate when the Court has decided that in so doing he acted on sufficient grounds and conformably to the law. I agree with you that there is no cowardice or dereliction of duty in refusing to perform a service to the State when the State refuses to protect you in the same. If we as citizens have our duties to the State, the State has also its duties towards us, and it is the plain and manifest duty of the State, when we have legally and on sufficient grounds signed a lunacy certificate, to protect us from any pecuniary losses attending any subsequent legal proceedings. And I would suggest that before a person is permitted to institute an action of this kind he should be required to deposit securities for the payment of the defendant's costs in the event of his losing his action.

Yours faithfully,

Stroud-green-road, N., May, 1888. R. ROBINSON, M.R.C.S.

LIVERPOOL.

(*From our own Correspondent.*)

DEATH OF DR. ARTHUR CRESSWELL RICH.

THE death of Dr. Arthur C. Rich in his thirty-second year is an event which, though not unexpected, came as a great shock to all his numerous professional and lay friends this afternoon. The deceased was the eldest son of the well-known and highly respected postmaster of Liverpool, Mr. J. D. Rich, and after being educated at King William's College, Isle of Man, he commenced his medical education at the Liverpool School of Medicine. From the very commencement of his professional career his kindly and obliging disposition made him a general favourite, and throughout the whole of it his conduct was marked with the most exceptional zeal and enthusiasm. After having passed the College of Surgeons, he became one of the house surgeons of the Royal Infirmary, and subsequently for a short period he was attached to the Birkenhead Borough Hospital. Having spent some months as resident medical officer in a lunatic asylum, he obtained an appointment as surgeon to one of the Pacific Steam Navigation Company's steamers, and afterwards to one of the steamers of the Orient line. After travelling in the United States and Canada, he returned to England and studied at St. Thomas's Hospital, London, where he was clinical assistant to the late Dr. Murchison, subsequently passing the M.B.Lond. with first class honours. Returning to Liverpool, he obtained the important appointment of medical officer to the male officers of the Liverpool Postal and Telegraphic Establishment, the duties of which he discharged till within ten days of his death. He was also assistant-surgeon to the Hospital for Cancer and Skin Diseases, and pathologist of the Royal Infirmary for four years. He was also lecturer and examiner to the St. John Ambulance Association, and his death will be deeply deplored by the Liverpool police, many members of which body he instructed. For some time he had been in failing health, and there can be no doubt that his very promising career has been cut short by his self-sacrificing zeal to his profession. He suffered from successive attacks of pyæmia while performing his duties as pathologist at the infirmary, the effects of which were probably aggravated by a malarial fever formerly contracted in South America. In his last illness he was attended with unremitting care by his friends, Drs. Carter and Macalister, and passed peacefully away without pain. He was married not very long ago, and much sympathy is felt for his widow, as well as for his father and mother.

HOSPITAL SATURDAY: COUNTING THE PENCE.

Near where the old post-office of Liverpool formerly stood is the office of the Hospital Saturday Committee, and for some time past half a dozen gentlemen have been working night after night counting the pence of the working men, checking each other's work, and rolling up the coins in proper packages preparatory to their being taken to the bank. This work, though very laborious, is done voluntarily, and with hearty good-will. Every care is taken to ensure accuracy and despatch. One working man contributed a Jubilee silver penny, really giving sixpence, as it was purchased from the committee for that sum by one of the honorary secretaries. It is to be regretted that type, rice grains, buttons, brass counters, and other rubbish, are found in the boxes.

Liverpool, May 15th.

BIRMINGHAM.

(From our own Correspondent.)

HOSPITAL SATURDAY.

THE amount received at the present time this year reached the sum of £7019 16*s.* 10*d.*, showing an increase of £199 9*s.* 4*d.* over the final sum of last year, all the contributions for the present year not having yet come in. This excess is due rather to the greater number of establishments contributing than to the amounts of individual contributions from large manufactories; also to the greater number of helpers this year, which the zeal of the committee ensured by personal and unremitting working in the cause. They must be congratulated upon their enthusiasm, and upon the substantial increase which has rewarded their efforts.

PESTS OF SOCIETY.

The borough coroner rightly applied this term to certain persons who made their livelihood by resorting to unlawful means of procuring abortion. At an inquest held upon the body of a married woman, aged thirty-seven, the post-mortem evidence showed that death resulted from blood poisoning, due to abortion, which had been brought on by artificial means, clumsily performed. All efforts made by the police to trace the perpetrators had been without avail. In the interests of justice this is to be regretted, since it is probable that a large number of these cases exist, though few meet with the disastrous consequences which this example affords. The motives which induce women to risk such operations may be various, but none the less are they to be condemned, and in unskilful hands they are not only unlawful but highly injurious.

GYMNASTIC EXERCISES IN BOARD SCHOOLS.

The second annual display by the scholars of the Birmingham Board Schools took place in the Town Hall on the 14th inst., and was largely attended. Under the auspices of the Physical Exercises Committee, the education of the children in this respect has made striking advance, and the manner in which the various evolutions were gone through elicited frequent applause. The Rev. Canon Wilkinson, who presided, spoke of the advantage of drill to the teachers in the maintenance of discipline, and the health and interest engendered by the activity of bodily exercises systematically controlled and regulated.

THE CLOSING OF PRIVATE WELLS.

A prosecution of considerable importance was undertaken by the Health Department of the Town Council on the 11th inst., and resulted in failure. The indictment was that the defendant allowed to remain upon his premises a well containing water so polluted as to be dangerous to health. The borough analyst stated that the water in question contained organic matter derived from sewage. Pressed by counsel whether the water was injurious to health, he replied that it was dangerous, and likely to injure health at any moment. Considerable discussion took place as to the method of analysis, and the personal part in this which had been undertaken by the analyst or relegated to others, and the case was eventually dismissed. As a test case, involving interests affecting the owners of private wells, there was an array of talent concentrated against the prosecution which broke down the evidence offered, and much learning was exhibited as to "grievous sewage contamination" and methods of analysis said to be unreliable and obsolete. The technicalities were manifestly elaborate, and scientific precision not being forthcoming, the proceedings were considered as a defeat of the authorities. The scarcity of water in the present season, and the supply of private houses by the corporation, are also points of significance in the dispute.

Birmingham, May 16th.

NORTHERN COUNTIES NOTES.

(From our own Correspondent.)

NEWCASTLE.

THE annual meeting of the Eye Infirmary was held here last week, adjourned from March 27th owing to the illness of the senior surgeon and governor, Mr. C. S. Jeaffreson, who has now returned to his work restored in health from his sojourn in the south. The Eye Infirmary is in a very satisfactory condition. The total number of patients treated has been 4039, of which 213 were new cases. The amount received from out-patients has been £73, while in-patients have contributed £103. The financial statement showed a balance in favour of the institution of over £100. Reference was made to the loss sustained by the death of Mr. Brown, who for over thirty years had ably filled the office of honorary secretary. Mr. Jeaffreson received the congratulations of all present at the meeting.—A very handsome offer has been made by a citizen of Newcastle, who has not as yet allowed his name to be disclosed, to found a home for crippled children in the suburbs of Newcastle. The village of Whickham is mentioned, which has a very healthy and picturesque situation, standing on the hills on the Durham side of the Tyne. The gentleman who has made this very kind offer proposes to provide and furnish a house suitable for the reception of twenty poor crippled children. This he engages to keep going for, say, five years, by which time he hopes the public will see the utility of the institution, and carry on the good work. There can be no question as to the necessity for this charity, for, I believe, up to this it has been impossible to get poor crippled children, not requiring hospital attention, into any suitable home nearer than London or Edinburgh. I predict a full response to this philanthropic idea, and that the home, when founded, will be well supported before the five years stipulated have elapsed.—It is proposed to open the Newcastle Infectious Diseases Hospital next month. Appearances would go to show that it will have to be opened without patients, as fortunately there is a scarcity of infectious cases in the city at present, which is to be hoped may continue for some time. I believe, however, that the hospital is to be opened for public inspection, and it is a very good idea to allow the poorer classes to see for themselves what very adequate accommodation is provided for them in case of this form of affliction overtaking them, and no doubt an inspection of the building (which is admitted to possess all the sanitary requirements of the day) will help towards lessening the objections which many have to removal.

LONGEVITY IN THE NORTH OF ENGLAND.

Mrs. Bruce, a resident of Hartlepool, who received the congratulations of her friends on attaining her hundredth year last April, died at her residence last Sunday evening. During the past two months, particularly when the weather was cold, there have died at Whitby and in the immediate neighbourhood twelve persons whose united ages amounted to 1019 years, or an average of eighty-five years each person. The oldest individual at present living at Whitby is a female inmate of the union workhouse, who is in her ninety-ninth year. Her husband is in the same workhouse, and is in his eighty-ninth year.

CARLISLE.

Last Sunday the collections for Hospital Sunday were taken in the diocese of Carlisle, and on the previous Saturday the workmen's collections. A special appeal has been made to the workmen this year to increase their contributions, and another collection is to be taken on next Saturday.—A serious outbreak of measles has occurred at the Calden-gate Schools, which are closed, with about fifty children laid up.

Newcastle-on-Tyne, May 15th.

EDINBURGH.

(From our own Correspondent.)

THE ROYAL INFIRMARY.

THE last annual report of this infirmary, submitted by the managers to the subscribers, shows no diminution of the valuable work that it accomplishes as a benevolent institution. Like most of its congeners, however, it calls aloud from time to time for a larger and wider support on the part of the general public than has been of late accorded it. This call it can make with a good grace, and without loss of dignity or descent to indiscriminate begging, since it freely receives and aids all suitable applicants without distinction, and bears on its scutcheon the motto *Patet omnibus*. It was felt lately that some outlying districts which benefited largely by the institution did little or nothing towards its support, and, in particular, remote Shetland was behindhand in this respect. Accordingly, a representative of the infirmary management was despatched to the northern islands, and it is now reported that he has represented the claims of the hospital to such good purpose that he has returned bearing the fruits of a very successful harvest, and assurances of increased contributions for the future. A recent announcement in the local papers of a handsome legacy to the institution might well relieve the public mind of anxiety on its behalf, for a time at least. Under the provisions of the will of the late Mr. Wallace, of Busbie, Ayrshire, it has fallen heir to a sum of over £21,000, a residual legacy, the balance of large funds left for the endowment of several philanthropic objects. But at the same time it must not be forgotten that there is urgent need for extension in both the medical and surgical hospitals if clinical teaching is to be maintained in a way consonant with the convenience of both patients and students. Such increased accommodation necessitates extra expenditure, and the annual cost of the establishment is already over £30,000, so that the plea for increased public support is founded on facts of unmistakable reality and undeniable importance.

UNIVERSITY EXTENSION LECTURES.

Mr. Patrick Geddes' course of Botany lectures, delivered at the Philosophical Institution, have attracted a good deal of public attention, so much so that the lecture hall has been found inadequate for the requirements of those who seek admission. This result shows how much need there is for such science classes, and augurs well for the success of the extension movement, which is now adapted for the needs of the city itself, in addition to supplying those of rural districts around, which it has done for the last twelve months.

Edinburgh, May 15th.

DUBLIN.

(From our own Correspondent.)

ROYAL COLLEGE OF SURGEONS IN IRELAND.

As previously mentioned, the portrait of Her Majesty the Queen will be unveiled on the 22nd inst., in the presence of the Lord-Lieutenant, the Prince and Princess of Saxe-Weimar, and other distinguished guests. The portrait has been executed in honour of Her Majesty's Jubilee, and the reputation of the artist, Mr. Catterson Smith, is such that an excellent picture may confidently be expected. On Thursday, the 17th inst., an election from among the Fellows will take place for an Examiner in Physiology and Histology, and in Pathology and Morbid Anatomy. A requisition having been made to the President to summon a meeting of the Fellows to consider the question of the amalgamation of the Proprietary Schools with the School of the College, a meeting will be held on Friday, the 18th inst., to discuss the subject. A meeting of the Fellows will be held on June 2nd to receive the annual report of the Council, and on the following Monday the election of a president, vice-president, council, and secretary for the ensuing year will take place. Mr. A. H. Corley retires from the presidency, and will be succeeded by Mr. Henry Fitzgibbon, and for the vice-presidency, which the latter vacates, there will be a contest between Dr. William Frazer and Dr. Austin Meldon. For the vacancy on the Council, two candidates are at present in the field: Mr. John B. Story, an ex-member of the Council and ophthalmic surgeon to St. Mark's Hospital, and Mr. Theodore Stack, who, if elected, will represent the subject of Dental Surgery. The College of Surgeons having undertaken the supervision and control of dental education in this country, many questions in connexion with these functions may have to be discussed, and Mr. Stack is put forward principally by those dentists who hold the Fellowship of the College.

ROYAL UNIVERSITY OF IRELAND.

The number of candidates who presented themselves for the various examinations last year amounted to 3106, as compared with 2933 in 1886. The Senate, in their annual report, state that a scheme has been adopted for the redistribution of the sum assigned for exhibitions and prizes, which they are of opinion will produce satisfactory results. There was a decrease of twelve in the number of students who matriculated in 1887, as compared with 1886.

OUTBREAK OF PNEUMONIA IN FERMOY.

A soldier having been found dead in his bed last week, and pneumonia having prevailed to a considerable extent among the men of the Bedfordshire Regiment stationed in Fermoy Barracks, it was deemed advisable to hold an inquest on the deceased. The jury, after hearing the evidence of Dr. Green, brought in a verdict to the effect that the deceased had died of asphyxia. The post-mortem examination of the lungs showed that there were no signs of pneumonia present.

UNIVERSITY OF DUBLIN.

An illuminated address is about to be presented from this University to the University of Bologna, on completing the 800th year of its existence. The address is in book form, bound in morocco, and written in Latin.

APOTHECARIES' HALL CONJOINT SCHEME.

The examinations under the Conjoint Scheme between the Apothecaries' Hall and the Royal College of Surgeons commenced last Monday. There are about thirteen candidates entered for the various examinations.

The death is reported of Dr. Barry Delany, resident medical superintendent of the Kilkenny District Lunatic Asylum. The cause of death was angina pectoris.

Dublin, May 15th.

BELFAST.

(From our own Correspondent.)

ELECTION OF CORONERS.

ON Thursday, May 10th, the sub-sheriff sat in the Court House, Banbridge, to receive the nominations for the office of coroner for the southern division of County Down. The three candidates were Dr. Heron, J.P.; Dr. W. Smyth, J.P.; and Dr. S. E. Martin, Newry. Very extensive canvassing had been going on for some time, and it was stated that special trains had been arranged to convey the voters. Dr. Heron, having been proposed and seconded, was declared duly elected. The explanation of the fact that there was no contest was that Dr. Martin retired, and as his supporters would have mostly voted for Dr. Heron, as a consequence Dr. Smyth's chances were minimised and he did not go forward.

The election of coroner for County Tyrone took place on Wednesday, May 8th, and caused as much excitement as a parliamentary contest. Every effort was put forward by the friends of the two candidates, Dr. T. J. Browne, and Dr. McGrath. On Friday, May 11th, the Sheriff announced the result of the election as follows: McGrath, 4940; Browne, 4753; majority 187. The contest, which was a very keen one, was fought almost entirely on political lines.

THE ROYAL HOSPITAL.

The summer session has now begun, but the students, many of whom have been attending the examinations of the Royal University in Dublin, have been later in entering this year than usual. On Monday Dr. W. B. M'Quitty was elected house surgeon in place of Dr. Powell, who has received an appointment in India. Prior to leaving, Dr. Powell was presented by the nurses and resident staff with a gold watch and chain.

THE BELFAST HOSPITAL FOR SICK CHILDREN.

Instead of waiting until all the money necessary to build the Victoria Convalescent Home is collected, the friends of this charity have decided to devote the interest of what is already in hand to enable them to send a few convalescents from the hospital to the country. They have taken a cottage at Ballynafeigh, one of the driest and most suitable of the districts around Belfast, and already several children have been sent out there.

Belfast, May 15th.

PARIS.

(From our own Correspondent.)

SOCIÉTÉ FRANÇAISE D'OPHTHALMOLOGIE.

THE sixth annual meeting of this Society was opened in Paris on Monday, May 7th, and occupied four days. Dr. Venneman of Louvain was elected president for the occasion. The following is a brief abstract of the principal papers that were read at the meetings. With regard to the extraction of luxated cataracts, Dr. Galezowski was of opinion that it would be dangerous in such cases to leave the crystalline lens *in situ*, and that it would be better to remove it by extraction. For this purpose he resorts to extraction without iridectomy, which leaves the diaphragm of the iris intact, and thus forms an efficacious barrier to the escape of the vitreous body. Dr. Fienzal of Paris preferred performing discision with the lanceolar knife, in the divers forms of congenital cataract, to the various procedures in use.—Dr. Abadie of Paris opened a discussion on secondary cataract. According to the author, secondary cataracts are incontestably more frequent since the procedure of Daviel has been in vogue. He referred also to the subject of artificial maturation as being intimately connected with secondary cataract. Dr. Abadie finds that all the procedures employed for the maturation of cataracts are defective, and he thinks it preferable, in presence of an incomplete cataract, to operate on it as it is, and, if a secondary cataract should supervene, to operate on that. In the operation for ptosis, Dr. Darier of Paris remarked that the old methods of procedure gave very unsatisfactory results. The idea of Dransart, to give to the upper lid a certain degree of motility in connecting the tarsal cartilage with the frontal and supra-orbital muscles by filaments of cicatricial tissue, has given birth to the operative procedures of Dransart, Pagenstecher, and De Wecker, which, with slight variations in the details, are all based on this same principle. He recommends that the suture threads should not be removed before the fourth or fifth day, and, should they cause suppuration along their track, frequent antiseptic washings and iodoform dressings should be employed; but on no account should the threads be removed before they have completely divided the tissues included in their knot. Dr. Vacher of Orleans prefers the galvano-cautery to the thermo-cautery in ocular surgery, as, notwithstanding the improvements effected in the latter, the galvano-cautery has always given him better results. It is, moreover, more manageable than the thermo-cautery. Dr. Fienzal prefers the actual cautery to the other methods employed in the treatment of keratocone. In four cases he employed excision of a fragment of the cornea after the manner practised by Dr. Galezowski, but they were all followed by synechia. Dr. Dianoux of Nantes recommends that scrofulous children affected with ocular complaints should not be sent to the seaside where the beach is formed of fine sand, as it has a very pernicious effect upon the eye. The seaside, however, where there is no sandy beach is always beneficial in these cases. In equatorial sclerotomy, Dr. Masselon of Paris, after having, in performing the operation, varied the direction, extent, and position of the section, has arrived at the conclusion that the best effects were obtained by a simple transverse puncture, practised with von Graefe's knife, at a small distance behind the ciliary body, near its infero-external part, a puncture which should sometimes be repeated to obtain a durable effect. The cases in which equatorial sclerotomy is recommended are glaucoma, whether advanced or absolute, or in those cases in which, an iridectomy having been performed, the glaucoma, not having retroceded or been suddenly aggravated, has sometimes given rise to intolerable pain.—A discussion on the operation for strabismus was opened by Dr. Abadie. The author does not approve of any other than operative measures, not even the so-called orthoptics which are being so much vaunted, for the cure of strabismus, as the latter would not only take some time to effect a cure, but when it does take place is not durable. Dr. Landolt of Paris thinks that orthoptic exercises are indispensable to augment the effect of the operation for strabismus when it has been insufficient, or to attenuate it when it is excessive. These exercises lead to the re-establishment of binocular vision. And this binocular vision may be obtained even when the visual acuity is very unequal in both eyes, as was established by Donders by the aid of researches undertaken by him in his laboratory, and practised on his assistants, whom he rendered artificially amblyopic. Dr. de Wecker stated that, from a report he had received from Dr. Knapp of New York, he found that "avancement capsulaire" was in favour in the practice of this surgeon for the treatment of strabismus—a procedure, he thought, highly to be commended. As regards stereoscopic exercises, Dr. de Wecker considered them very useful and even indispensable to complete the operative action and to procure the entire fusion of the images, when these are, after the operation, inclined the one on the other, as is often the case. Dr. Abadie, in reply, maintained that when the eye has been a long time deviated amblyopia is created, and that the operation alone is capable of producing a permanent effect.—Dr. Panas of Paris read a note on Enucleation in Panophthalmia. He remarked that notwithstanding enucleation of the globe of the eye in the course of panophthalmia had been considered a very grave operation, and likely to produce fatal meningitic complications, his experience had taught him that enucleation should be practised whenever the attempts made to arrest the suppuration of the globe remain fruitless. Even in the height of panophthalmia enucleation should be performed, but on the express condition that there do not already exist lesions indicating a generalisation of the infection, and that the patient suffers from no organic complaint, such as albuminuria, diabetes, &c. Antisepsis must of course in all cases be rigorously carried out. Dr. Galezowski, in his remarks on operation in simple and absolute glaucoma, stated that in absolute glaucoma, with atrophy and friability of the iris, sclerotomy was of little avail, and the surgeon is often led to practise enucleation. To avoid arriving at this extremity, Dr. Galezowski practises at each of the two meridians of the eye, the vertical and the horizontal, two small incisions, which divide the sclero-corneal fragment and the filtrating passages of the eye perpendicularly to their direction. For this purpose he introduces into the sclerotic, a little distance from the fragment and from behind to the front, the fine blade of a knife of von Graefe, curved on the cutting edge. The point is pushed into the anterior chamber, and the fragment is divided in withdrawing the knife. This small incision is repeated in the four cardinal points of the cornea. In this way the eye has been preserved in more than one apparently hopeless case, and notably in one of grave hæmorrhagic glaucoma. As regards simple glaucoma, Dr. Galezowski practises crucial sclerotomy, but he has observed a return sooner or later of the symptoms of the affection. Dr. Javal exhibited a new stereoscope constructed under his direction. By the aid of this stereoscope one can estimate, in dioptrics and not in degrees, the angles of convergence of strabismus, which he considers will render great service in the orthoptics of this infirmity. Dr. Bull of Paris exhibited an instrument, the object of which is to control binocular vision, and in the treatment of strabismus this instrument permits the patient to read without squinting.

"BURIED ALIVE."

A report has just reached Paris that the body of the man referred to in my letter of last week, in the paragraph headed "Buried alive," has been reached by removing the earth from above him. The medical men, on examining the body, attributed death to the poor fellow having been crushed by successive falls of earth upon him, and to the wounds caused to his head by the rings of iron that were placed to protect the sides of the well: but they state that he certainly did not die of hunger. What struck the medical men was the absence of cadaveric rigidity. In extricating the body from the earth the workmen were surprised at the suppleness of the limbs. The face was partially covered with sand; the nose, partially crushed, was pushed to the left; two large patches of ecchymosis

were to be seen on the forehead; the eyes were half opened; the arms were crossed over the chest; the right leg was slightly doubled up; the lower part of the face on the right side was much bruised; the hair was white and long. At the necropsy the stomach was found to contain no vestige of food, and one of the lungs was absolutely congested. No fracture of the limbs. It is believed, from the above observations, that death had taken place on May 2nd—that is to say, twelve days after the accident. It would appear from reports published that he had escaped from five similar accidents, but has succumbed to the sixth. In connexion with this case the following note may be found interesting. On the 2nd of September, 1836, a similar accident happened to a well-sinker, who was employed in sinking a well in a sandy soil in the Commune of Champ-Vert, near Lyons. He had come up, but had forgotten his tools, which he left at the bottom of the well of twenty metres. In spite of the warning given him, he went down to fetch his tools, but before he could be drawn up again, a falling in of the earth, which was anticipated, took place. Believing that the man was lost, his companions were about returning to the village to report the circumstance, when they remarked that one of the cords which had been drawn up from the well had been newly cut. From this they concluded that the man was alive, and without losing a moment they commenced the work of deliverance. This lasted two weeks, and it was only on Sept. 16th that the man, whose name was Dufavet, was brought to the surface. He was in a deplorable state, but with judicious care was restored to health in less than a week. He related all the details of the situation in which he was placed. For the first three days the space in which he was confined measured a little more than two metres, but after further falling of the earth it was diminished progressively, so that from the third day the man was obliged to remain doubled up, and he could not even extend his arm. In this position he was threatened each moment to be crushed by a fresh falling in of the earth, and during this time he was entirely without food. He was thirty years of age.

Paris, May 15th.

INDIA.

(From a Correspondent.)

Bombay, April 20th.

CHOLERA IN 1886.

THE twenty-third annual report of the Sanitary Commissioner with the Government of India, for the year 1886, has just been issued. There has been a diminished prevalence of cholera as compared with the preceding three years; the mortality from it throughout those parts of the country where death registration is effected was 208,371, the corresponding figures for 1885, 1884, and 1883 being 385,928, 287,609, and 248,860 respectively. The reduction has gradually been considerable. The heaviest mortality appears to have prevailed in Assam, and next to that province the Central Provinces suffered most. I further glean from the report that the urban population suffered in a greater proportion than the rural, except in the Central Provinces and Berar. In connexion with the increased prevalence in Assam, it should be remarked that there was an increased immigration of labourers (coolies) into that province. There was a diminished prevalence in the North-West Provinces. The year in the Punjaub was one of remarkable freedom from the malady. The same remark would appear also to apply to the Madras and Bombay Presidencies. Mr. Hewlett, Sanitary Commissioner of Bombay, remarking upon this immunity, writes: "The lessened prevalence of cholera during 1886 was certainly not due to any diminution of filth in and around the villages and towns in the Presidency, and the only way to account for it is by the supposition that the factor necessary for its development (probably atmospheric) was absent." As regards atmospheric and telluric influences, there is nothing special to notice in these columns from the report of Sir B. Simpson, M.D. As regards the communicability of cholera from those afflicted to those in attendance on them, the data furnished in the report before me point to a negative conclusion. Out of 161 persons who attended on 41 cases only one is said to have contracted the disease. He was what in this country is called "sweeper," who has to do with the removal of excreta, and the cleansing of commodes, chamber utensils, &c., and he was one out of seven who attended on a first case, contracted the disease, and died. As regards "sanitary defects," none are noted in the case of British troops; in respect to native troops, one outbreak is attributed to the water supply from a "tank which had a bad reputation." As regards the Presidency gaol in Calcutta, where cholera prevailed, it is reported that, the supply of water being barely sufficient, tank water was employed for cooking purposes. The prison, moreover, was overcrowded during the year, and conservancy arrangements were imperfect. At other places where cholera prevailed in gaols drainage is reported to be faulty, and in one river water is blamed, and in another the site, which was an old burial-ground. And, lastly, I come to the effects of movement on the progress of cholera. The reports again show that movement of affected bodies of men was attended, in most cases, with immediate cessation of cholera. This applies to troops as well as to prisoners.

April 27th.

FEVERS IN INDIA IN 1886.

I propose now to study the figures referring to *fevers*. In the year 1886 there were 3,470,754 deaths recorded from fevers, as compared with 3,396,239 in the preceding year. With the exception of the Bombay Presidency, the Punjaub, Assam, and Burmah, the figures were mainly contributed from all the other provinces, the most marked having been from the North-West Provinces, while the least had been from Bombay. In Bengal there has been a steady increase in the death-rate from fevers. In the North-west Provinces, where the death-rate has been the highest, it was equivalent to 27·58 per mille of population, against 25·48 in 1885. Fevers are only separately dealt with so far as the army of India is concerned. It appears that intermittents were less prevalent, having fallen from 471 in the preceding year to 332, a difference of 139 per 1000. There was a diminution of ague in the Bengal and Bombay Presidencies, and an increase in the Madras. Remittent and simple continued fevers were slightly more prevalent, and most so in the Bengal Presidency. As to enteric fever, we find that there is no material change in the mortality, that it is no new disease in this country, but that a change of diagnosis is only the result of better knowledge. "The determination of the exact nature and nomenclature of the disease," writes Sir B. Simpson, M.D., "must be left to the clinician, the anatomist, and the bacteriologist." With regard to frequency and causation, the reports of medical officers point to enteric fever being the principal fever of India, and some of the cases returned as simple continued or ague are in reality mild cases of enteric. Enteric fever is quite a distinct disease in this country from remittent fever, simple continued fever, and ague. The differential diagnosis is possible with patience, perseverance, and increasing knowledge. There are cases in which this is easy, but the difficulty of diagnosis, when it exists, is when these affections shade off into each other, being due to the *causa causans* influenced by different circumstances, or, in other words, by a combined *materies morbi*. The nature and causation are the same as in Europe, but the difficulty lies in catching the cause *in flagrante delicto*. The disease is the enteric fever of Budd, the pythogenic typhoid of Murchison, and the abdominal typhus of Gurgensen, but the course is distorted by the intercurrence of malaria, or, in other words, very often it is a hybrid of enteric and malaria. As regards causation, opinions point to climatic and telluric influences, specially affecting the young and unacclimatised men, and if there be insanitary conditions these seem to act peculiarly on them. It is, however, a noteworthy fact that women and children of European soldiers are not affected to anything like the same extent as the men are, and yet they are subjected to nearly the same climatic and other conditions. There are many who believe in the pythogenic origin of the disease—i.e., origin *de novo*. According to them, no doubt the sanitary surroundings of cantonment are well-nigh perfect; but then the whole of India is little better than one vast latrine (and a foul smelling one), and though the barracks &c. may be perfect, they are surrounded by a vast area of insanitation. There are, therefore, manifold ways in which the enteric fever poison may be generated. The soldier, moreover, in his rambles in the bazaars and villages, has scores of opportunities of contracting infection. Sir B. Simpson, in noticing the post-mortem records furnished by medical officers, criticises the vague statements, such as "typical typhoid lesions," or "typical typhoid ulcers," being found without any trouble being taken to give a minute description or differentiation between the typhoid ulcer and dysenteric, and I

might also add tubercular. The largest number of cases of enteric fever among British troops occurred in Lucknow and Secunderabad, and the largest number of deaths in the latter station and in Sialkot. At the first-named station there were in the year 105 admissions, with 15 deaths, or a percentage of 14·29; at Secunderabad 75 cases, with 25 deaths, or a percentage of 33·33; and at Sialkot 69 cases, with 24 deaths, or a percentage of 34·78. The disease stands in well-defined relationship to length of time in India, which is in inverse ratio to liability, and many medical men in India believe that the proneness to the disease is even greater by this than age as a predisposing cause. Some interesting statistics are adduced in support of this, which I need not for lack of space reproduce. And lastly, dengue occurred only in the Bengal Presidency in a mild form, with no deaths from it. In Bengal proper it was present from April to July in the Gangetic provinces, and in the Punjaub from October to December. Occasionally the breakbone pains lingered in convalescence. Most of these cases were among the men, and only three women and three children were attacked.

PERMANGANATE OF POTASH IN COBRA POISON.

As is well known, Mr. Vincent Richards advocates the employment of permanganate of potash in this form of snake-bite. Only recently an opportunity occurred to him to give it a trial in the case of himself. A Calcutta paper says that he had a narrow escape the other day whilst experimenting with a cobra at the dispensary of the Eastern Bengal State Railway. He had taken out one of the cobras from its case, when, while he held it in his right hand, the reptile bit him severely on the index finger of the left hand. With remarkable presence of mind, it is stated, Mr. Richards, having despatched the snake by violently dashing it to the floor, excised the bite, laying the finger open to the bone. He then applied some permanganate of potash, and, having tightly ligatured the finger and the left arm, instantly drove down to the residence of Dr. McLeod. Mr. Richards was better shortly after 3 P.M., and was kept under observation till 6 o'clock, when he was pronounced to be out of danger and allowed to go home. But for the prompt measures taken, it is expected that Mr. Richards would have fallen a victim to the cobra.

THE EUROPEAN GENERAL HOSPITAL IN BOMBAY.

A Bombay paper says that there is every probability of Government sanctioning a scheme for a new building for this institution. There is, therefore, an immediate prospect of defective accommodation being effectually improved. The staff of this hospital consists of Mr. A. N. Hojel, physician, and Mr. R. J. Baker, M.B., resident surgeon, the latter being also professor of materia medica at the Grant Medical College

THE BOMBAY UNIVERSITY.

The following gentlemen have been elected dean and members of Syndicate in the Faculty of Medicine of this University for the current year: Drs. Vandyke Carter and James Arnott, and Mr. Eduljee Noshirwanjee.

THE SERVICES.

WAR OFFICE.—Brigade of Foot Guards: Surgeon-Major A. B. R. Myers, Scots Guards, to be Brigade Surgeon, vice G. Perry, Coldstream Guards, placed on retired pay (dated May 13th, 1888).—Coldstream Guards: Surgeon E. H. Fenn, from the Grenadier Guards, to be Surgeon-Major, in succession to Brigade-Surgeon G. Perry (dated May 13th, 1888).

ARMY MEDICAL STAFF.—Surgeon-Major William Nash, M.D., to be Brigade Surgeon (ranking as Lieutenant-Colonel), vice W. J. Wilson, M.D., retired (dated May 2nd, 1888); Surgeon-Major William Creyk, M.B., is granted retired pay (dated May 16th, 1888); and Surgeon John Mulrenan, M.D., half pay, has been granted retired pay (dated May 14th, 1888).

ARMY MEDICAL RESERVE OF OFFICERS.—Surgeon and Honorary Surgeon-Major H. Walter Kiallmark, Buckinghamshire (Royal Bucks) Yeomanry Cavalry, to be Surgeon-Major, ranking as Lieutenant-Colonel (dated May 16th, 1888).—The undermentioned Officers to be Surgeons-Major, ranking as Majors (dated May 16th, 1888): Surgeon and Honorary Surgeon-Major John Prior Purvis, 2nd Volunteer Battalion, the Queen's Own (Royal West Kent Regiment); Honorary Surgeon-Major John Percy Waddy, 3rd Battalion the Royal Irish Regiment; Surgeon Thomas Michael Dolan, M.D., F.R.C.S.E., 1st Volunteer Battalion, the Duke of Wellington's (West Riding Regiment); and Surgeon H. Fredk. Holland, M.D., 3rd Volunteer Battalion, the Bedfordshire Regiment.—The undermentioned Officers to be Surgeons, ranking as Captains (dated May 16th, 1888): Surgeon Frederick Flood Moore, 3rd Volunteer Battalion, the King's (Liverpool Regiment); Surgeon Wm. John Ready, 2nd Volunteer Battalion, the South Wales Borderers; Surgeon Edmond West Symes, M.D., 2nd West York (the Prince of Wales's Own) Yeomanry Cavalry; Acting Surgeon Donald Campbell Black, M.D., 5th Volunteer Battalion, the Highland Light Infantry; Acting Surgeon Chas. Edwd. Douglas, M.B., 6th Volunteer Battalion, the Black Watch (Royal Highlanders); and Acting Surgeon George Wyndham Murphy, M.B., 3rd Volunteer Battalion, the Bedfordshire Regiment.

BOMBAY MEDICAL ESTABLISHMENT.—Surgeon-Major Andrew Barry, M.D. (dated Feb. 26th, 1888), to be Brigade Surgeon.

ADMIRALTY.—Inspector-General John Fisher has succeeded Inspector-General Haran at the Royal Naval Hospital, Stonehouse; Deputy Inspector-General of Hospitals and Fleets Doyle Money Shaw, C.B., has been promoted to the rank of Inspector-General of Hospitals and Fleets in Her Majesty's Fleet (dated May 7th, 1888); Staff Surgeon John Kelly Conway, M.D., has been promoted to the rank of Fleet Surgeon in Her Majesty's Fleet (dated May 6th, 1888); and Deputy Inspector-General H. F. Norbury has been appointed to Plymouth Hospital.

The following appointments have been made:—John Fisher, Inspector of Hospitals, to Plymouth Hospital, and Adam B. Messer, M.D., Deputy Inspector of Hospitals, to Malta Hospital (both dated May 7th, 1888); Staff Surgeon John Mackie, to the *Monarch;* Surgeon George D. Twigg, to the *Impregnable* (both dated May 9th, 1888); Edward A. Spiller, M.D., to the *Triton* (dated May 12th, 1888); and Fleet Surgeon Thomas H. Knott and Surgeon Arthur W. May, to the *Orlando* (dated May 24th, 1888).

ARTILLERY VOLUNTEERS.—1st (late 5th) Durham: Acting Surgeon G. Bolton, to be Surgeon (dated May 12th, 1888); and Surgeon J. Johnstone is granted the honorary rank of Surgeon-Major (dated May 12th, 1888).

RIFLE VOLUNTEERS.—2nd Volunteer Battalion, the Royal Warwickshire Regiment: William James Pickup, M.B., to be Acting Surgeon (dated May 12th, 1888).—2nd Volunteer Battalion, the Duke of Cornwall's Light Infantry: Frederick Dunbar Sutherland McMahon, Gent., to be Acting Surgeon (dated May 12th, 1888).

Obituary.

WILLIAM ALSEPT RICHARDS, M.D. LOND.

WE regret to have to record the death of Dr. W. A. Richards of Winchester, who died on Wednesday, the 9th inst., aged forty-two years. He was born at Marazion, in Cornwall, and educated at Probus Grammar School, and then privately by the Rev. Dr. Scrivener, then rector of Gerrans, now of Hendon. He passed the matriculation examination at the University of London, and in October, 1863, entered on his medical studies at King's College, and obtained the second Warneford Entrance Scholarship for proficiency in general education. He successively gained the junior, second year, and senior scholarships, and in 1865, being then only a second-year's student, won the exhibition and gold medal in Organic Chemistry, Materia Medica, and Pharmaceutical Chemistry at the first M.B. examination of the University of London. In 1866 he was also adjudged the Warneford Prize in King's College, and was elected an Associate. In 1867 he qualified as M.R.C.S. Eng. and L.R.C.P. Lond., and during the winter of 1867-68 was house physician at King's College Hospital. In 1868 he graduated as M.B. at the University of London, and was placed second in Honours in Medicine and in Obstetric Medicine, and was awarded a gold medal and marked worthy of the scholarship in both subjects. He was then elected house surgeon to the Royal Hants County Hospital at Winchester, and in 1871 passed his M.D. examination. He became a partner of the late Mr. Butler of Winchester, and was elected physician to the Hospital, to Winchester College, and to the

County Prison. He succeeded in obtaining a large practice in Winchester, and was much loved and respected for his professional knowledge and his private character. He was an excellent physician, remarkable alike for keen diagnostic power and skill in treatment. About a month ago he began to suffer from some obscure affection of the large bowel, attended with severe hæmorrhage, and this became very urgent and distressing shortly before his death. On a post-mortem examination, extensive ulceration and congestion of the large intestine, from the cæcum to the lower part of the rectum, were found; the mischief seemed almost dysenteric in character, although Dr. Richards had never been abroad, and only suffered from illness during the past four or five weeks. His fellow students grieve for the loss of a cheerful, pleasant, and kind-hearted friend, and his patients regret the untimely death of a most capable and sympathetic physician.

Medical News.

UNIVERSITY OF CAMBRIDGE.—The following candidates for the respective degrees have been examined and approved:—

Degree of M.C.—Mag. Morris, (C. A.), Caius.
Degree of B.C.—Ds. Beddowes, Pembroke; Ds. Whishaw, H. Cav.
Degree of M.B. (Third Examination).—Part 1: Ds. Battersby, Trin.; Ds. Blaker, H. Cav.; Ds. Bowen, King's; Ds. Campbell, H. Cav.; Ds. Chaplin, Joh.; Ds. Colbeck (E. R.), Caius; Mag. Courtney, Pemb.; Ds. Crisp, Caius; Ds. Elsmore, Christ's; Ds. Foster, Trin.; Ds. Gervis, Trin.; Ds. Goddard, Caius; Ds. Gordon, Trin.; Ds. Hawkins, Caius; Ds. Hopkinson, Emman.; Ds. Lloyd (G. T.), Joh.; Ds. Murray, Trin.; Ds. Musson, King's; Ds. Ogilvie, King's; Ds. Roberts (R. J.); Ds. Rutherford, Sidney; Ds. Saunders (G. R.), Caius; Ds. Sortain, Caius; Ds. Syfret (S. B.), Trin. H.; Ds. Veale, Christ's; Ds. Weber, Trin.; Ds. Wickham (G. H.), Caius.—Part 2: Ds. Barber, Cath.; Ds. Copeland (W. H. L.), King's; Ds. Harris (H. E.), Christ's; Ds. Hicks, H. Cav.; Ds. King, H. Cav.; Little, Down; Ds. Percival, Trin.; W. R. Pollock, Trin.; Ds. Prowse; Ds. Smithson, Christ's; Ds. Watts (A. T. G.), Corpus.

ROYAL COLLEGES OF PHYSICIANS AND SURGEONS OF EDINBURGH, AND FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW.—At the final examination for the triple qualification held in Edinburgh in the present month, of seventy candidates the following forty-four passed, and were admitted L.R.C.P.Ed., L.R.C.S.Ed., and L.F.P.S.Glasg.

G. A. Bannatyne, Rutherglen; R. A. Simeon, Delhi; A. E. Vaughan, Crewe; W. A. Frisell, Liverpool; J. B. Meredith, Queen's County; S. Mellor, Huddersfield; R. Aldous, Norfolk; H. Buxton, Lancashire; F. W. Browning, Monmouthshire; A. B. Watson, Norfolk; F. John Pacey, Melbourne; W. Yorke, Glasgow; C. R. Pigg, Newcastle-on-Tyne; J. K. Coutts, Aberdeen; K. B. Narayan, Kuch Behar; Albin Siddon, Bangalore; Miss J. Crosfield, Liverpool; W. Grey, Northumberland; S. J. Dunlop, County Antrim; A. Mill, County Antrim; H. Chadwick, Burnley; A. Bradshaw, Sierra Leone; H. Osborne, Notts; P. J. Mehta, India; B. R. Jones, Crewe; J. H. Pestell, Australia; E. F. Shaw, Hereford; C. H. Sharpe, Norwich; C. F. Lovibond, Bridgewater; W. Bell, Enniskillen; Alex. Macdonald, Edinburgh; D. Barry, County Cork; W. W. Williamson, Scarborough; B. E. Craster, Middlesborough; A. G. Laidler, Stockton-on-Tees; H. F. Lawrence, Tasmania; A. H. Goodwyn, Devonshire; G. O. Moorhead, India; H. G. Mackid, Canada; C. Smyth, Limerick; H. C. C. M'Niell, Folkestone; G. H. Douthwaite, Warminster; I. Crawford, Omagh; and W. B. Marston, jun., London.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—At meetings of the Court of Examiners held on May 11th and 12th the undernamed obtained the Fellowship of the College:—

Henry Moore Brabazon, Ind. Med. Depart.

ROYAL UNIVERSITY OF IRELAND.—At the recent examinations the following gentlemen have been successful:—

Bachelor of Medicine.—Upper Pass Division: T. R. Dunne, Allan B. Mahood, Martin Molony, P. J. O'Brien. Passed: J. H. Corcoran, D. Crowly, W. R. Gore, J. J. Griffin, J. Hunter, W. Kelleher, Gilbert Love, D. M'Kee, L. O'Clery, Martin Semple, H. Smith, and John W. Wilson.
Master in Surgery.—J. F. St. John Annesley, J. Clifford, J. H. Corcoran, D. Crowly, R. B. Gorsuch, J. Hunter, J. J. Lynch, D. M'Kee, P. M'Kenna, A. B. Mahood, C. W. Morgan, J. J. O'Brien, P. J. O'Brien, L. O'Clery, M. Semple, and H. Smith.
Master of Obstetrics.—J. H. Corcoran, D. Crowly, J. R. Davison, A. B. Mahood, H. Smith, and J. Tomb.

COTTAGE HOSPITAL FOR KIRKCALDY.—The Town Council have accepted Mr. M. B. Nairn's offer to erect a cottage hospital for the burgh, at a cost of £3000.

A CONVALESCENT HOME FOR TORQUAY.—On the 9th inst. the memorial stone of the Convalescent Home for Young Women at Chelston, Torquay, was laid by the Dowager Countess of Castle-Stuart, foundress of the institution.

THE hospital at Swindon will, by Her Majesty's sanction, be called the Victoria Hospital.

H.R.H. THE DUCHESS OF ALBANY distributed at the Guildhall on the 12th inst. the prizes for the past year in connexion with the London Division of the Volunteer Medical Staff Corps.

FOOTBALL CASUALTIES IN NEW ZEALAND.—A game of football was played at Wellington, New Zealand, on the 14th inst., between the English visitors and a local team. One of the players had a leg broken and another an arm.

NEWSVENDORS' BENEVOLENT AND PROVIDENT INSTITUTION.—Viscount Lymington, M.P., will preside at the festival dinner of this Society at Cannon-street Hotel, on Wednesday, July 4th.

ON the 11th inst. a grand concert was given at the Kensington Town Hall, under the patronage of Princess Mary Adelaide of Teck, in aid of the funds of the Royal Hospital for Children and Women, Waterloo-bridge-road. About £50 in excess of the expenses were realised.

GREAT NORTHERN CENTRAL HOSPITAL.—On the 9th inst. a bazaar in aid of the building fund of this charity was opened by the Lord Mayor at the Holloway Hall. The contributions to the fund already received amount to upwards of £25,000, and the total cost of the new buildings is estimated at £45,000.

MANCHESTER AND SALFORD SANITARY ASSOCIATION.—A conference of medical men, clergymen, and the general public, convened by the committee of this Association, will be held at the Memorial Hall on the 6th prox., to discuss the present excessive mortality in Manchester and Salford, with the object of aiding the authorities in measures to remove the causes of it. Dr. Ransome, the chairman of the committee, will introduce the subject.

DERBY BOROUGH ASYLUM.—Dr. Macphail, who in 1882 succeeded Dr. Macleod (on his promotion to the charge of the Beverley Asylum) in the office of assistant medical superintendent at Garlands Asylum, has been appointed medical superintendent of the Derby Borough Asylum. Dr. Macphail was in 1884 awarded the medal of the Medico-Psychological Association for an essay containing his researches on the blood of the insane.

ROYAL HOSPITAL FOR DISEASES OF THE CHEST, CITY-ROAD.—On Wednesday last Lord Charles Bruce presided over a meeting of working men in St. Luke's for the purpose of devising means of aiding the above hospital. In the end the formation of a committee was decided upon to confer with the secretary with the view of obtaining the co-operation of artisans, local firms, and societies in the work of increasing the funds of the charity.

PHARMACEUTICAL SOCIETY OF GREAT BRITAIN.—To celebrate the opening of the new examination hall and research laboratories this Society held a *conversazione* at the Society's House, Bloomsbury-square, on Tuesday last, which was numerously attended, and subsequently a concert was given in the new examination hall. The new building provides the accommodation so long required, and special attention has been bestowed upon the sanitary and ventilating arrangements.

BURIAL REFORM.—On Monday last the Duke of Westminster presided at the tenth annual meeting of the Church of England Burial Reform Association, held at Grosvenor House. The principal resolution was proposed by Mr. F. Seymour Haden, F.S.A., to the effect "That the present mode of interment in brick vaults and crowded graves should be discontinued, as dangerous to the health of the living, and that 'earth to earth' burial should be encouraged with the use of readily perishable coffins, and that the Home Secretary be memorialised to institute an inquiry into the condition of cemeteries." The speaker claimed that cremation was unnatural, and he opposed it on sanitary grounds. Nature required time to perform her various functions. How was it to be supposed, then, that cremation could do in a few hours that which took nature years to accomplish—viz., the resolution of the body to its ultimate element? Mr. Wollaston Pym said that fifty years ago Brompton Cemetery was condemned by the sanitary authorities, yet 5000 bodies are still interred there every year. Other speakers included the Lord Bishop of Gloucester and Bristol, Lord Mayor of York, Dr. Danford Thomas, and Mr. E. Chadwick.

ANGLO-DANISH EXHIBITION.—This Exhibition was opened on the 14th inst. by the Princess of Wales, in the presence of a brilliant assemblage of visitors.

BEQUESTS.—The late Mr. Robert Mackay Smith of Bellevue-crescent, Edinburgh, bequeaths, free of legacy duty, to the Edinburgh Society for Medical Missions, Livingstone's district, £500; to the Royal Edinburgh Hospital for Sick Children £2000; to the managers of the new Royal Infirmary, Edinburgh, £4000; and, on the death of his sister Isabella, £1000 to the Association for the Better Endowment of the University of Edinburgh; and £1000 to the Royal Society of Edinburgh.—The late Dr. Daniel F. Brady has bequeathed £100 to the Royal Medical Benevolent Fund Society of Ireland.—Mr. J. Aloysius Blake has left £500 to St. Mark's Ophthalmic Hospital, Dublin.

MEDICAL NOTES IN PARLIAMENT.

Hydrophobia.

IN the House of Lords on the 14th inst., Viscount Cranbrook, replying to the Earl of Carnarvon, stated that it was not considered necessary to introduce any measure at present for the more effectual suppression of rabies. The Privy Council had issued an order of which local authorities had largely availed themselves, and drastic steps had been taken under it. He himself believed that if muzzling were carried out throughout the whole of the country it would prove an effectual remedy, but he regarded it as almost impossible owing to the number of dogs which, from the uses to which they were put, could not be muzzled. The symptoms of rabies were now printed on each dog licence, and he thought such information would prove useful.

Coroners Bill.

On the 15th inst. the Lord Chancellor moved the second reading of this Bill. One of its objects, he said, was to make it clear that coroners had the power to hold inquests in respect of fires. Another portion of it dealt with the appointment of coroners. He thought that the day had gone by when a judge of any kind should be chosen by popular election, and the Bill, therefore, proposed that in future the appointment of coroners should rest altogether with the Lord Chancellor. With reference to this latter point, however, the Government would be prepared to consider any other proposal that might be made in committee.—Lord Herschell observed that boroughs had appointed their own coroners for some years past, and the system had worked well. He should therefore propose in committee that the duty in counties should rest with the new County Councils. The Bill was then read a second time.

Contagious Diseases Acts in India.

In reply to the Marquis of Ripon, Lord Cross said that the Government of India was now engaged in a revision of the regulations made for the spread of venereal disease in cantonments, and a despatch was going out to India from the Secretary of State in Council which would prohibit the compulsory examination of women and the making of any regulations which could justly be construed into a legislation of prostitution. This statement was identical with one made on the previous evening in the House of Commons.

Pleuro-pneumonia.

In the House of Commons, on the 11th inst., Mr. Hozier called attention to the increase of the disease of pleuro-pneumonia in cattle, and moved that no committee of inquiry into the subject would be satisfactory which was not specially empowered to conduct practical experiments with the view of ascertaining the value of inoculation.—Dr. Farquharson supported the motion, and the discussion was continued by Sir A. Campbell, Mr. Esslemont, Sir R. Paget, Mr. Barclay, Mr. M. Stewart, and Mr. C. W. Gray.—Mr. Long said that the discussion which had taken place would have its due effect upon the Government, but he could not on their behalf accept a resolution couched in such terms. He could not accept a resolution which would practically be to censure the committee before even they had reported, and he hoped that the motion would not be pressed. The House was then counted out, there being only twenty-nine members in their places.

Darenth Asylum.

In reply to Mr. Firth, Mr. Ritchie stated that with regard to the cost at Darenth, as compared with the Leavesden and Caterham Asylums, it was to be observed that the latter asylums provide for a very much larger number of inmates than the Darenth Asylum. The excess of cost is to some extent accounted for by the fact that the Darenth Asylum has not had its full number of inmates, and also that the expenses of maintaining an establishment are not necessarily in proportion to the number of inmates which it provides for. The attention of the managers would, however, be directed to the matter.

Habitual Drunkards Bill.

On the 16th inst., the Habitual Drunkards Act (1879) Amendment (No. 2) Bill was read a second time.

The Sweating System.

On the 15th inst., in reply to Mr. Norris, Mr. Matthews said that, pending an inquiry before the select committee which is now sitting, it would be premature for the Government to determine whether by an amendment of the Factory Acts the evils of the sweating system can be abated. When the report was received the Government would consider what steps could be taken.

Fermoy Barracks.

In answer to Mr. Flynn, Mr. E. Stanhope said that the returns show that there were four admissions into hospital at Fermoy for pneumonia during the week ended the 11th inst. One death was also reported from that disease during the same period. Careful inquiry had been made into the circumstances of the case, but the sanitary condition of the barracks was reported to be good.

The Royal College of Surgeons.

In answer to Dr. Farquharson, Sir W. Hart Dyke said that the petition of the members of the Royal College of Surgeons had received the consideration of the Lords of the Council, and would not be referred to the Royal Commission recently appointed to consider the means of facilitating University degrees for resident students in London. There had been a correspondence between the Council Office and the Royal College of Surgeons on the subject of their petition for a Supplementary Charter, and the College had accepted a proposal from the Privy Council to omit from the Supplementary Charter points upon which there has been a controversy with the Fellows and Members of the College.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column are invited to forward it to THE LANCET *Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week for publication in the next number.*

ADAM, G. R. W., M.B., C.M.Ed., has been appointed Honorary Medical Officer to the Women's Hospital, Victoria, Australia.

BANNISTER, M., L.R.C.P. Lond., M.R.C.S., has been appointed Assistant Surgeon to the No. 7 Length of the Manchester Ship Canal.

BURR, J., L.R.C.P.Ed., L.F.P.S.Glas., has been reappointed Parochial Medical Officer for the Middle District of St. Nicholas, Aberdeen.

CLARKE, WM. F., M.R.C.S., M.B., B.S Lond. (late of Guy's Hospital), has been elected House-Surgeon to the Newport and County Infirmary, vice W. Basset, resigned.

COLMAN, WALTER S., M.B.Lond., M.R.C.S., has been appointed Junior House-Physician to the National Hospital for the Paralysed and Epileptic, Queen-square, Bloomsbury, vice Dr. R. J. Williamson, resigned.

DAWSON, W. E., L.K.Q.C.P.I., L.S.A., has been appointed Physician to the Churchill Home for Women, Chiswell-street, Finsbury-square, E.C.

DUCKETT, C. ALEX., M.R.C.S., L.R.C.P. Lond., L.S.A., has been appointed Junior House-Surgeon to the Ancoats Hospital, Manchester.

EDWARDS, J. H., M.R.C.S. L.S.A., has been appointed Vaccination Officer for the Holywell District of the Holywell Union.

ENSOR, J. A., M.R.C.S., L.S.A., has been appointed Medical Officer for the Stalbridge District of the Sturminster Union.

GORDON, J., M.B., C.M.Aber., has been reappointed Parochial Medical Officer to St. Nicholas, Aberdeen.

GRIEVE, W. D., M.B., C.M.Ed., has been appointed House-Surgeon to the Dumfries and Galloway Royal Infirmary.

HOOPER, J. W. D., L.R.C.P.Edin., L.R.C.S.Edin., has been appointed Honorary Medical Officer to the Women's Hospital, Victoria, Australia.

HUDSON, T. G., M.D., L.R.C.P.Lond., has been appointed Medical Referee to the Westminster and General, Marine and General Life Offices; also to the Sickness and Accident Assurance Company of Collingsbro', for Leeds and District.

HUGHES, H. C., M.B., C.M.Edin., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical and Vaccination Officer for the No. 2 District of the Bangor and Beaumaris Union.

JOHNSTONE, T., M.D.Ed., M.B., C.M., L.M., M.R.C.P.Lond., has been appointed Medical Officer for the Fourth District of the Wharfedale Union.

KERR, W. S., M.D.Glas., L.R.C.S.Ed., has been appointed Surgeon to the Dumfries and Galloway Royal Infirmary.

LEACH, J. COMYNS, M.D.Dur., B.Sc.Lond., D.P.H.Camb., F.I.C., has been reappointed Medical Officer of Health for the Sturminster Rural Sanitary District for a period of three years.

LOVEGROVE, C., L.R.C.P.Ed., L.M.Ed., L.F.P.S.Glas., has been appointed Consulting Surgeon to the No. 7 Length of the Manchester Ship Canal.

MACDONALD, A. D., M.D.Edin., M.B., C.M., L.M., L.R.C.P. Edin., L.R.C.S.Ed., has been appointed Physician to the Dumfries and Galloway Royal Infirmary.

MACPHAIL, S. RUTHERFORD, M.D. Edin., Assistant Medical Superintendent to the Cumberland and Westmoreland Asylum, Garlands, Carlisle, has been appointed Medical Superintendent to the New Derby Lunacic Asylum.

MARSDEN, J. A., M.R.C.S., L.S.A., has been appointed Medical Officer for the Standish District of the Wigan Union, vice Price, resigned.

MARSHALL, WILLIAM, M.D.St.And., L.F.P.S.Glas., has been appointed Physician to the Dumfries and Galloway Royal Infirmary.

MILES, C. H., L.S.A., has been appointed Medical Officer of Newport Pagnell Union.

O'SULLIVAN, M. J., M.D.Q.U.I., M.Ch., has been appointed Honorary Medical Officer to the Women's Hospital, Victoria, Australia.

PEARSE, THOMAS FREDERICK, M.D.Brussels, M.R.C.P.Lond., M.R.C.S., has been appointed Surgeon to the West-end Hospital for Diseases of the Nervous System, Paralysis, and Epilepsy, vice S. Benton, Esq., resigned.

PRICE, E. O., M.B., C.M.Ed., has been appointed Medical Officer for the No. 1 District of the Bangor and Beaumaris Union, vice Williams, resigned.

RENDALL, PERCY, M.D., M.R.C.S., has been appointed Assistant Colonial Surgeon at the Gambia.

SCROGGIE, J. G., M.B., C.M.Aber., has been reappointed Parochial Medical Officer to St. Nicholas, Aberdeen.

SHARMAN, M., M.B.Glas., C.M., M.R.C.S., has been appointed Medical Officer for the Third District of the Leicester Union.

SMITH, G. T., M.R.C.S., L.S.A., has been appointed Medical Officer for the Alrewas District of the Lichfield Union.

SMITH, P. B., M.D.Aber., M.B., C.M., has been reappointed Parochial Medical Officer to St. Nicholas, Aberdeen.

SPENCER, W. H., M.A., M.D.Cantab., has been appointed Consulting Physician to the Bristol Royal Infirmary.

THOMSON, ALEX., M.D.Glas., L.F.P.S.Glas., has been appointed Surgeon to the Dumfries and Galloway Royal Infirmary.

WILLIAMS, P. W., M.B.Lond., M.R.C.S., has been appointed Assistant Physician to the Bristol Royal Infirmary.

Vacancies.

In compliance with the desire of numerous subscribers, it has been decided to resume the publication under this head of brief particulars of the various Vacancies which are announced in our advertising columns. For further information regarding each vacancy reference should be made to the advertisement.

BIRMINGHAM AND MIDLAND SKIN AND LOCK HOSPITAL, Birmingham.—Acting Surgeon.

BOROUGH OF BIRMINGHAM.—A Resident Medical Superintendent of the Borough Hospital for the Treatment of Small-pox and Scarlet Fever. Salary £150 per annum, with furnished residence, coal, gas, attendance, washing, and rations.

BRIDGNORTH AND SOUTH SHROPSHIRE INFIRMARY.—House Surgeon. Salary £120 per annum, rising £10 per annum to £150, with rooms, coal, gas, and attendance.

CHELSEA HOSPITAL FOR WOMEN, Fulham-road, S.W. — Resident Medical Officer. Salary £60 per annum, with board and residence.

CHILDREN'S HOSPITAL, Birmingham.—Resident Medical Officer, and an Assistant Resident Medical Officer. Salaries, respectively, £80 and £40, with board, washing, and attendance in the institution.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, Victoria-park, E.—Assistant Physician.

FULHAM UNION.—Resident Medical Superintendent of the Infirmary, and Medical Officer of the Union Workhouse. Salary £350 per annum, with residence (partly furnished), fuel, light, and washing.

GARLANDS ASYLUM, Carlisle. — Assistant Medical Superintendent. Board and lodging, and £120 yearly.

GLASGOW EYE INFIRMARY.—Resident House Surgeon. Salary £75, with apartments and board.

HALIFAX INFIRMARY AND DISPENSARY.—Senior House Surgeon. Salary £80 per annum, advancing to £100, with residence, board, and washing.

INGHAM INFIRMARY AND SOUTH SHIELDS AND WESTOE DISPENSARY.—Senior House-Surgeon. Salary £60, rising to £70, with board and residence. Also Junior House-Surgeon. Salary £50, rising to £60.

KING'S COLLEGE, London.—Assistant Surgeon.

LONDON TEMPERANCE HOSPITAL, Hampstead-road, N.W.—Surgeon to the hospital, to take charge of both in- and out-patients.

METROPOLITAN ASYLUMS BOARD, Norfolk-street, W.C. — Assistant Medical Officer (Clinical Assistant) for three months at the Small-pox Hospital Ships lying in the Thames at Long Reach, near Dartford, Kent. Remuneration: board, furnished apartments, and washing.

NORTH LONDON CONSUMPTION HOSPITAL, Hampstead and London.—Resident Medical Officer. Honorarium £40 per annum, with board and rooms in the hospital.

ST. PETER'S HOSPITAL FOR STONE AND URINARY DISEASES, Henrietta-street, Covent-garden.—House-Surgeon for six months. Honorarium 25 guineas, board, lodging, and washing.

VICTORIA HOSPITAL FOR CHILDREN, Queen's-road, Chelsea.—House Surgeon and House Physician. Each will receive an honorarium of £50, and will be provided with board and lodging in the hospital.

WELLINGBOROUGH AND DISTRICT MEDICAL INSTITUTE. — A doubly qualified medical man to take charge of the Institute, and attend on members, their wives, and families. Salary £280 per annum (exclusive of accouchement fees), in addition to dwelling-house, surgery, coachhouse, and stable, free of rent, rates, taxes, and repairs.

Births, Marriages, and Deaths.

BIRTHS.

CASSIDI.—On the 11th inst., at Trinity-terrace, Derby, the wife of Francis Cassidi, M.A., M.D., of a daughter.

WEDDELL.—On the 11th inst., at Mentone, Clapham-common, S.W., the wife of J. Call Weddell, M.D., of a son.

MARRIAGES.

CARTER—WAKELING.—On March 8th, at Holy Trinity Church, Upper Tooting, Ernest Carter, L.R.C.P., L.R.C.S.Edin., L.S.A., son of the late Thomas Carter, of Brighton, to Rosa, fourth daughter of George Wakeling, of Sumburgh Lodge, Balham.

JEFFERIS—TARLTON.—On March 27th, at Newtown, Sydney, James Biddington Jefferis, M.B., C.M., M.R.C.S., of Erskineville-road, Newtown, to Louie, third daughter of the Hon. Robt. A. Tarlton, M.L.C., of South Australia.

SNELL—GOLDNEY.—On the 14th ult., at All Saints' Church, Berbice, British Guiana, by the Ven. Archdeacon Farrar, B.D., assisted by the Rev. Canon Butt, B.A., and the Rev. Francis Welch, George Snell, M.R.C.S.Eng., Medical Superintendent, Public Lunatic Asylum, to Louisa Augusta, youngest daughter of G. J. Goldney, Manager, Colonial Bank, Berbice.

DEATHS.

BELL.—On the 15th inst., at The Elms, Louth, Lincolnshire, John Bell, M.R.C.S., J.P., in his 87th year.

BRYANT.—On the 14th inst., at his country residence, Highwoods, Burghfield-hill, near Reading, Walter John Bryant, M.D., of Sussex-square, Hyde-park-gardens, W., aged 75.

HOARE.—On the 12th inst., at Water Newton, Northamptonshire, Wm. Parker Hoare, F.R.C.S.Eng., late of Faversham and Dartford, Kent, aged 81.

RICHARDS.—On the 9th inst., in London, W. A. Richards, M.D., of Winchester, aged 42.

RICH.—On the 15th inst., at Catherine-street, Liverpool, Arthur Creswell Rich, M.B., M.R.C.S., in his 31st year.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

Medical Diary for the ensuing Week.

Monday, May 21.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M. and each day at the same hour.

CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2.30.

ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesday, 2.30 P.M.

HOSPITAL FOR WOMEN, SOHO-SQUARE. — Operations, 2 P.M., and on Thursday at the same hour.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.

Tuesday, May 22.

GUY'S HOSPITAL.—Operations, 1.30 P.M. and on Friday at the same hour. Ophthalmic Operations on Monday at 1.30 and Thursday at 2 P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.

CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Consultations, Monday, 2.30 P.M. Skin Department, Monday and Thursday, 9.30 A.M.

ROYAL INSTITUTION.—3 P.M. Mr. Sidney Colvin: Conventions and Conventionality in Art.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8.30 P.M. Dr. Percy Kidd and Mr. H. H. Taylor: On the Value of the Tubercle Bacillus in Clinical Diagnosis.—Sir William B. Dalby: The Removal of Bony Growths from the External Auditory Canal.—Dr. Alfred Sangster and Dr. Fredk. W. Mott: Pemphigoid Eruption with Changes in Peripheral Nerves.

Wednesday, May 23.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesday and Thursday, 1.30 P.M. Surgical Consultations, Thursday, 1.30 P.M.

ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.

LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.

GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.

KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; Friday, 2 P.M.; Saturday, 1 P.M.

CHILDREN'S HOSPITAL, GREAT ORMOND-ST.—Operations, 9 A.M.; Saturday, same hour.

BRITISH GYNÆCOLOGICAL SOCIETY.—8.30 P.M. Dr. Fancourt Barnes: Complete Chronic Inversion of the Uterus.—Mr. Lawson Tait: The Influence of Removal of the Uterus and its Appendages on the Sexual Appetite.—Dr. Henry T. Rutherfoord: Treatment of Uterine Fibroids by Hydrastis Canadensis. Specimens will be exhibited. Council at 8 P.M.

Thursday, May 24.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M. Ophthalmic Operations, Friday, 1.30 P.M.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

ROYAL INSTITUTION.—3 P.M. Prof. T. G. Bonney: The Growth and Sculpture of the Alps.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8.30 P.M. Dr. Walter Holbrook Gaskell: The Relations between the Function, Structure, Origin, and Distribution of the Nerve-fibres which compose the Spinal and Cranial Nerves.

Friday, May 25.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

QUEKETT MICROSCOPICAL CLUB.—8 P.M. Papers by Messrs. Buffham, Smith, and Priest.

CLINICAL SOCIETY OF LONDON.—8.30 P.M. Dr. Ord: A Summary of the Conclusions arrived at by the Committee on Myxœdema.—Mr. A. E. Barker: A case of Intussusception of the Cæcum, Ascending and Transverse Colon treated by Abdominal Section.—Mr. R. W. Parker: Two cases of Intussusception, with special regard to Symptoms and Treatment.—Mr. Page: Two cases of Rupture of Intestine without External Wound. — Dr. Ward Cousins: Case of Stone in which Lithotomy was performed twice within two months. Living Specimens: Dr. White and Mr. Henry Baker: Two cases of Unusual Congenital Deformity.

ROYAL INSTITUTION.—9 P.M. Mr. Francis Galton: Personal Identification and Description.

Saturday, May 26.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.

ROYAL INSTITUTION.—3 P.M. Mr. Carl Armbruster: The Later Works of Richard Wagner. (With Vocal and Instrumental Illustrations.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Stewart's Instruments.)

THE LANCET Office, May 17th, 1888.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
May 11	30·50	E.	49	43	105	59	40	...	Fine
,, 12	30·48	S.E.	50	44	90	64	43	...	Fine
,, 13	30·25	S.W.	61	52	117	73	42	...	Fine
,, 14	29·91	N.E.	52	46	104	58	46	...	Cloudy
,, 15	29·73	S.W.	51	45	109	63	44	...	Cloudy
,, 16	29·57	S.W.	58	52	113	63	47	...	Overcast
,, 17	29·60	S.W.	55	53	71	58	52	·29	Raining

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editors."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked and addressed to the Sub-Editor.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "to the Publisher."*

We cannot undertake to return MSS. not used.

NOTIFICATION OF INFECTIOUS DISEASES.

A CORRESPONDENT of the *Standard* has given urgent proof of the necessity for the compulsory notification of infectious diseases. On his estate, he says, is a farm on which eight persons had been taken ill with diphtheria, the milk during this period having been sent to London; yet this circumstance only became known to the local sanitary authority by a letter which he himself addressed to the medical officer of health. He has conferred a service upon all by giving publicity to the occurrence; for it is only by such means that this long-hoped-for measure will have any prospect of becoming law.

Dr. Bryan.—We sympathise with our correspondent, but the ground of complaint must obviously lie with the person who authorised the advertisement.

Dr. Russell (Glasgow) is thanked.

THE B.C. DEGREE OF CAMBRIDGE.

To the Editors of THE LANCET.

SIRS,—Your readers are aware that of late Cambridge has been granting a special surgical degree—the B.C. This is very commendable. But the regulations are changed every six months without any due notice being given. Eighteen months ago it had a separate existence; a year ago it was combined with the M.B. A candidate for the degree applied for a syllabus from the University authorities. From it he learnt that he was to be examined in "surgical operations and the application of surgical apparatus." He prepared himself, and was surprised when he had a twenty minutes' oral examination on general anatomy, including the origin and distribution of the cranial nerves. Now, as the syllabus did not mention the subject of anatomy at all, I ask, Is it right that candidates should be treated in this way? By all means make an examination sufficiently difficult, but I hold that due notice ought to be given beforehand.

I am, Sirs, yours faithfully,

May 14th, 1888. CICERO.

HARD TIMES IN THE PROFESSION.

Mr. John Creaghe, L.K.Q.C.P.I., favours us with a letter on his view of hard times. He attributes them to our social and political system—to the domination of the many by the few. The application of this doctrine, even if true to the case of the medical profession, is not easily to be made. Though we cannot find space for Mr. Creaghe's letter, we have read it with considerable interest.

Cymro.—The Secretary of the College.

ENTOZOA IN ST. PETERSBURG.

ACCORDING to the observations of Dr. D. A. Kessler on the excreta of s of both sexes and all ages living in St. Petersburg, entozoa of various kinds appear to be very prevalent in that city, being present in no less than 195, or 32·48 per cent. of the cases. The most common form was bothriocephalus latus, which was found in 47 of them, the least common being tænia solium, which occurred in 18. On comparing his own results in the case of 208 children with those published by Banik, founded on examination of 315 children in Munich, the percentage of cases in which worms were found was 43·75 in St. Petersburg and 38·88 in Munich. In the Munich children the percentage of oxyurus was 30·15, while in St. Petersburg it was 13·94. On the other hand, there was no case of bothriocephalus in Munich, but 8·17 per cent. of these cases in St. Petersburg. The tæniæ, too, were four times as numerous in the Russian cases as in the Bavarian ones.

Volunteer.—Our correspondent must be mistaken when he says he joined as acting surgeon "with the rank of captain." The rank granted to acting surgeons has always been that of lieutenant. We recommend him to write to the Under-Secretary for WAR, when he will receive correct information on the various points referred to in his letter to us.

MEDICAL ETIQUETTE.

To the Editors of THE LANCET.

SIRS,—If you would kindly express an opinion on the following, it would greatly assist in determining the future relations of two medical practitioners.

TWO medical men practising in a country town are on unfriendly terms. A consultation is required, and A writes to B to arrange, but B returns the letter unopened. B, finding out the purport of the letter, calls on the patient (without having been asked), and makes an examination, leaving word with the patient's friends that A can call at his (B's) residence, and hear his opinion. B also calls on the following two days, but is not again allowed to see the patient. Was it proper for B to call and examine the patient without A's knowledge? What future relations should A observe towards B?

I am, Sirs, yours faithfully,

MEDICAL ETIQUETTE.

"*" The above note throws no light on the grounds of B's remarkable behaviour. It is exceedingly difficult to justify or understand it. On the supposition that he had just cause of dissatisfaction with A, he should at least have kept himself absolutely away from A's case. A cannot be expected to have any relations with B till his most unusual conduct is explained or apologised for.—ED. L.

KASHMIR MEDICAL MISSION.

THE report of this Mission for the past year furnishes very satisfactory reading. Over 6000 patients have been attended to, and very large numbers of portions of the New Testament have been sold (instead of the free distribution which obtained formerly); and this has not only been done throughout the length and breadth of the valley, but even as far north as Astor. It is, as Dr. Neve explains, difficult year by year to point out striking changes in the condition and prospects of the Mission, but these changes have been going on none the less surely. No longer is physical force brought to bear by the Kashmir Government to prevent patients attending the hospital. The avenues leading to the Mission premises are no longer closely watched by Sepoys, as in former days, nor are those who resort to the hospital threatened with fines, stripes, and imprisonment. Such a report is sure to be read with pleasure, and we cordially wish the institution a continuance of its present prosperity.

Mr. B. Bryan's letter shall receive attention next week.

"URETHRAL INSTRUMENTS."

To the Editors of THE LANCET.

SIRS,—A few weeks ago I sent you a short note to the effect that an instrument recently devised by Mr. Distin-Maddick was almost if not quite identical with the compound catheter invented by the late Dr. Andrew Buchanan of this city. Mr. Maddick, at my request, kindly sent me his catheter for inspection, when I discovered that it is *not* identical, and differs from the former in being clearly intended for cases of retention of urine, and not of stricture. I am sorry to have fallen into this error from the description of the instrument and the drawings of it, and it is due to Mr. Maddick that I should openly acknowledge it.

I am, Sirs, yours truly,

Glasgow, May 10th, 1888. D. CAMPBELL BLACK.

FILTHY BOOKS FOR FRIGHTENING YOUNG MEN.

C. H. P. sends us a pamphlet of the above sort puffing "Dr. Bell's" self-restorer, and calls on the medical profession to stop the circulation of such literature. But surely this is the business of the police or other representatives of the public, not of the medical profession, whose motives would be misconstrued.

J. C. should consult our Students' Number.

SIX AT A BIRTH.

THIS very rare phenomenon occurred in the first week of the present month at Castagnola, a village in the neighbourhood of Lugano, on the Italian-Swiss frontier. The wife of the Syndic (Mayor, as we should call him) brought forth at a birth six children, four males and two females, all of whom died shortly after, while the mother made a good recovery. Her name is Filomena Rezzonico; she is thirty-eight years of age, and has already given birth to seven children after only two confinements, four being born at one delivery and three at another. Her husband, the Syndic, by his former wife had ten children, of whom seven survive. A note, with comments on the case, will shortly be published by a well-known gynæcologist of Milan.

Domus.—A surgeon cannot recover for medical attendance rendered by an unqualified assistant.

THE MARSHALL AND SHAW FUND.

To the Editors of THE LANCET.

SIRS,—May we once again trespass on your kindness to acknowledge the following donations to the above fund, which have come in during the last few days? The list is now closed, and the total amount received is £376 3*s.* 6*d.*, which sum, minus a small amount for expenses, has been handed to the two gentlemen. The legal expenses have amounted to upwards of £300, but the exact sum is not yet known.

We take this opportunity of thanking all subscribers to the fund for the ready way in which they have responded to our appeal, and we also especially thank the Editors of THE LANCET for giving such valuable publicity to our subscription lists.

We are, Sirs, yours faithfully,

J. MICHELL CLARKE,
W. H. HARSANT, } Hon. Secs.

Clifton, May 15th, 1888.

Amount acknowledged £364	2	0	Spencer, W. H., M.D....	£2	2	0
Keall, W. P.	3	3	0	Inglis, Alex. M., M.D.	1	1	0
Trotman, W. C., M.D. ..	3	3	0	Thomas A. Garrod,			
Ormerod, H.	2	2	0	M.D.	0	10	6

SARAH NICOL MEMORIAL HOSPITAL, LLANDUDNO.

WE are sorry to see columns of the local newspapers occupied with a somewhat angry discussion of so simple a question as whether a medical man resident in Llandudno should have the power to attend his patient when she goes into the Cottage Hospital. We see no room for anger in such a discussion, and little for difference of opinion. In a cottage hospital all resident practitioners should be treated alike. The discussion to which we refer is spoiled on both sides by certain personalities which, we are sure, the authors will regret.

Mr. F. H. Douglas had better make application to Messrs. Moore and Co., 125, Houndsditch, E.C.

Mr. E. B. Wright should consult his medical attendant.

ENLARGED SPLEEN.

To the Editors of THE LANCET.

SIRS,—Will any of your readers kindly give me information or references to published cases of patients suffering from enlarged spleen on whom operations of such nature as lithotomy &c. have been performed, and the result.

I am, Sirs, yours truly,

Norwich, May 12th, 1888. CHARLES WILLIAMS.

COMMUNICATIONS, LETTERS, &c., have been received from—Mr. Tweedy, London; Dr. Yellowlees, Glasgow; Dr. Geo. Johnson, London; Mr. J. Cæsar, Sheerness; Mr. Cheatle, London; Mr. Queely, Maytown, North Queensland; Mr. Walsham, London; Mr. Dovaston; Mr. B. Bryan, London; Dr. Hawkes, Hastings; Dr. Mallins, Watton; Mr. Blancard, Ramsgate; Mr. Macalister, London; Mr. O. Bowen, Liverpool; Mr. A. H. D. Acland, London; Dr. Jacob, Leeds; Messrs. Burgoyne and Co., London; Dr. Campbell Black, Glasgow; Dr. Evers, North Seaton; Dr. Riehl, Vienna; Surgeon Freer, Birmingham; Dr. Gamble, Abergavenny; Inspector-General Haran, Plymouth; Mr. C. Williams, Norwich; Dr. A. Swan, Batley; Mr. Berry, Wigan; Mr. H. Fenwick, London; Mr. R. Knaggs, Trinidad; Mr. Ford, Devonport; Mr. Darwin, Bangkok; Dr. W. A. Renshaw; Mr. Stilliard, Birmingham; Mr. Black, Glasgow; Dr. Campbell, Garlands; Mr. Thorpe; Mr. Creaghe, Buenos Ayres; Mrs. Anderson; Mr. Garstang, Bolton; Messrs. Maconochie Bros., Lowestoft; Mr. Macmillan, Nottingham; Dr. Balkley, New York; Mr. Plimmer, Norwood; Dr. Garry, Liverpool; Messrs. Leary and Son, Norwich; Mr. R. Robinson, London; Mr. Popert, Southport; Dr. J. Oliver, London; Dr. Stroud, Pretoria; Dr. Carne-Ross, Penzance; Mr. W. Pye, London; Mr. Clutton, London; Mr. Alcan, Paris; Mr. J. Poland, London; Mr. Groves, Dorset; Mr. Vokes, Birmingham; Mr. Briscoe, Bolton; Mr. Campbell, Carlisle; Mr. Bayes, Wellingboro'; Mr. Oldham, Liverpool; Mr. Hartley, Birmingham; Mr. Boucher, Bridgnorth; Mr. Burnie, Bradford; Mr. Hall, South Shields; Medicus, Birmingham; E., London; Medical Officer of the Local Government Board; Cicero; D. K., Notts; Hull Advertising Agency; F. E.; R. H. E., London; C. H. P.; Probationer; M. O. H., London; Merchant.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Liveing, London; Mr. Daglish, Kent; Mr. Taylor, Norfolk; Messrs. Christie and Co., London; Mr. Brown, Westgate; Messrs. Rocke, Tompsitt, and Co., London; Dr. Blandford, London; Mr. Butterfield, Peterboro'; Mr. Woodcock, Bradford; Dr. Drysdale, London; Messrs. McFarlan, London; Mr. Higgens, Malvern; Mr. Rendall, London; Mr. Symons, China; Mr. David, Wales; Miss Lambert, London; Messrs. Oliver and Boyd, York; Major Pead, Dulwich; Mr. Lee, Leeds; Messrs. Ross and Co., Belfast; Mr. Wink, Elgin; Mr. Gant, London; Messrs. Richards and Co., London; Miss Hunt, Dublin; Mr. Bella, London; Mr. Bryan, Littlehampton; Messrs. Price, London; Mr. Draper, Huddersfield; Mrs. Wright, Leicester; Messrs. Rowntree, York; Mr. M'Auslane, Glasgow; Dr. Adams, London; Mr. Cocking, Plymouth; Dr. Ritchie Otley; Messrs. Warren, Bristol; Mr. Love, Glasgow; Major Williams, Stroud; Dr. Richards, Manchester; Mr. Mussie; Mr. Heywood, Manchester; Dr. Gwynn, Salop; Dr. Bennett, Burnley; Messrs. Edis and Co., Huntingdon; Dr. Richardson, London; Medicus, Exeter; Lancs; Sussex, London; Locum, Liverpool; A. S. A., London; Hospital for Epilepsy, London; C. R. V. B., London; Doctor, Beckenham; Bona Fide, Sheffield; M.D., London; Agra, London; L. B., London; Beta, London; Medicus, London; J. G. B., London; Zeta, London; J. B., Winchester; Holiday, Bristol; Alpha, London; Spes, London; Fay, London; H. W., London; General Apothecaries' Co., London; Ajax, London; Narcissus, London; Doctor, Crewe; Matron, Barrow-in-Furness; Alpha, Liverpool; H. F., Nottingham; D., London; J. M., London; M.R.C.S., Bristol; Medicus, Reading; X. L., Leeds; M. G., London; Medicus, Hatcham.

Dorset County Chronicle, Herald and Weekly Free Press, Baltimore Daily News, Surrey Advertiser, Llandudno Advertiser, Sutton Mercury, Fife Herald, Hampshire Chronicle, Bournemouth Visitors' Directory, Liverpool Journal of Commerce, &c., have been received.

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Half a Page	2	15	0
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The Publisher cannot hold himself responsible for the return of testimonials, &c., sent to the office in reply to advertisements; copies only should be forwarded.

NOTICE.—Advertisers are requested to observe that it is contrary to the Postal Regulations to receive at Post-office letters addressed to initials only.

An original and novel feature of "THE LANCET General Advertiser" is a special Index to Advertisements on page 2, which not only affords a ready means of finding any notice, but is in itself an *additional* advertisement.

Advertisements (to ensure insertion the same week) should be delivered at the Office not later than Wednesday, accompanied by a remittance.

Answers are now received at this Office, by special arrangement, to Advertisements appearing in THE LANCET.

Terms for Serial Insertions may be obtained of the Publisher, to whom all letters relating to Advertisements or Subscriptions should be addressed.

Advertisements are now received at all Messrs. W. H. Smith and Son's Railway Bookstalls throughout the United Kingdom and all other Advertising Agents.

Agent for the Advertising Department in France—J. ASHER, 66, Rue Caumartin, Paris.

NOTICE.—JOHN JAMES CROFT is no longer Publisher, or in any way connected with the Publishing or any other Department of THE LANCET. All business communications should be addressed to "Publisher, THE LANCET Office, 423, Strand, London." Post Office Orders and Cheques should be crossed "London and Westminster Bank, St. James's-square."